

Natural Resources Conservation Service

Montana Water Supply Outlook Report February 1, 2013



Picture: Madison Plateau SNOTEL Site near West Yellowstone

Water Supply Outlook Report and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

Brian Domonkos Water Supply Specialist Federal Building 10 East Babcock, Room 443 Bozeman, MT 59715 Phone 406-587-6991

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

Montana Water Supply Outlook Report as of February 1, 2013

The majority of January 2013 was dry with only two significant storms impacting the state, one at the beginning of the month, the other at the end. Statewide snowpack dipped from 103 percent of median on January 1, to 96 percent of median on February 1. Similarly, continuing the downward slide that began after a great start in October, year-to-date precipitation remains slightly above average at 106 percent. Given the current trends in both snowpack accumulation and precipitation, reservoirs are currently poised to better anticipate below average runoff. Storage levels are slightly above average at 105 percent statewide. With nearly 35 percent of the snow accumulation season remaining, significant changes in snowpack are possible. Streamflow forecasts assume near normal snowfall, precipitation and temperature for the remainder of the year and are estimated to average 94 percent during the April-July runoff season. The majority of the Surface Water Supply Indices saw the same negative progression, but changed little from last month.

Snowpack

As we optimistically entered the New Year most basins across the state of Montana saw slightly above to near normal snowpack conditions, with the exception being some locations along the Rocky Mountain Front and North Central Montana which were slightly below normal. The first week of January started a decline in snowpack across the state as a high pressure blocking pattern centered itself across much of the western states. The Northwest part of Montana did see a brief period of relief from this during the second week and saw some return to snowy weather helping the basins to stay near normal.

The high pressure sank back into the state after the middle of the month bringing along with it first cold dry air from Canada followed by warm dry air from the Southwest. During this time all basins in Montana saw a decrease in the basin snowpack numbers as we sat high and dry waiting for the snow to return. Luckily, the last week of the month provided ample snowfall in most basins as we returned to a more seasonal weather pattern. Of special note is the Bridger Range in Southwest Montana which under the "Bridger Cloud" received 2 inches of Snow Water Equivalent in a five day period under moist Northwest flow. As we ended the month, the last storm provided some relief to most of the basins decrease in snowpack median experienced during the month, returning most basins to near where we started January percentage wise. Be sure to view individual reports online at http://www.mt.nrcs.usda.gov/snow/

| RIVER BASIN | • • • • | LAST YEAR OF MEDIAN | JANUARY % CHANGE |
|---|---|---|---|
| COLUMBIA KOOTENAI FLATHEAD UPPER CLARK FORK BITTERROOT LOWER CLARK FORK MISSOURI MISSOURI MISSOURI HEADWATERS JEFFERSON MADISON GALLATIN MISSOURI MAINSTEM HEADWATERS MAINSTEM | 92 97 93 93 86 89 103 102 106 97 96 97 106 97 106 107 106 97 106 97 96 97 106 97 96 97 96 97 96 97 97 <td> 103 105 94 114 111 112 95 89 96 80 103 103 103 103 103 101 105 101</td> <td>$\begin{array}{cccc} & -8 \\ & -17 \\ & -7 \\ & 0 \\ & -4 \\ & -7 \\ & -4 \\ & -7 \\ & -4 \\ & -7 \\ & -7 \\ & -5 \\ & -7 \\ & -5 \\ & -9 \\ & +1 \\ & -1 \\ & +2 \\ & +1 \\ & -1 \\ & +46 \\ & -9 \\ & -6 \\ & -8 \\ & -8 \end{array}$</td> | 103 105 94 114 111 112 95 89 96 80 103 103 103 103 103 101 105 101 | $\begin{array}{cccc} & -8 \\ & -17 \\ & -7 \\ & 0 \\ & -4 \\ & -7 \\ & -4 \\ & -7 \\ & -4 \\ & -7 \\ & -7 \\ & -5 \\ & -7 \\ & -5 \\ & -9 \\ & +1 \\ & -1 \\ & +2 \\ & +1 \\ & -1 \\ & +46 \\ & -9 \\ & -6 \\ & -8 \\ & -8 \end{array}$ |
| LOWER YELLOWSTONE | | 101 | , |

Precipitation

At 83 percent of average, January produced the lowest monthly total precipitation since October 1, 2012, in nearly all Montana watersheds. According to SNOTEL data, only the Milk River Basin received above average precipitation during January. Despite a below average month, year-to-date statewide precipitation remains slightly above average. East of the Divide precipitation at 100 percent of average, and West of the divide precipitation is better at 113 percent of average. The next few months will be critical as March through June is typically the wettest period in Montana. At the time of this report the typical basin precipitation summaries based on National Weather Service COOP station and SNOTEL data were not available. Only

automated SNOTEL station data in the mountainous areas of Montana and Wyoming were available for basin summaries. Be sure to view individual reports online at http://www.mt.nrcs.usda.gov/snow/

Reservoirs

State-wide reservoir storage was 105 percent of average and 90 percent of last year. Reservoir storage west of the divide was 115 percent of average and 95 percent of last year. East of the Divide, reservoir storage was 101 percent of average and 88 percent of last year.

| RIVER | BASIN | olo | OF | AVER | AGE | 010 | OF | LAST | YEAR |
|---|-------|---------------------------------------|---------------------------------------|--|---------------------------------------|---------|-----------|-------------------------------|------|
| KOOTENAI FLATHEAD UPPER CLARK BITTERROOT . LOWER CLARK | | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | 112 118 112 115 | | · · · · | · · · · · | 86 103 77 124 100 | |
| MADISON GALLATIN MISSOURI MAI SMITH-JUDITH SUN-TETON-MA | | · · · · · · · · · · · · · · · · · · · | · · · · · · · | 103 107 98 100 106 101 125 | · · · · · · · · · · · · · · · · · · · | · · · · | · · · · · | 98 102 87 77 96 | |
| YELLOWSTONE UPPER YELLOW LOWER YELLOW | | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | 187 108 115 108 105 | · · · · · · · · · · · · · · · · · · · | · · · | · · · · · | 97 75 | |

Streamflow

State-wide, streamflows are forecast to be 94 percent of average. West of the divide streamflows are forecast to be 98 percent of average and east of the divide are forecast to be 91 percent of average.

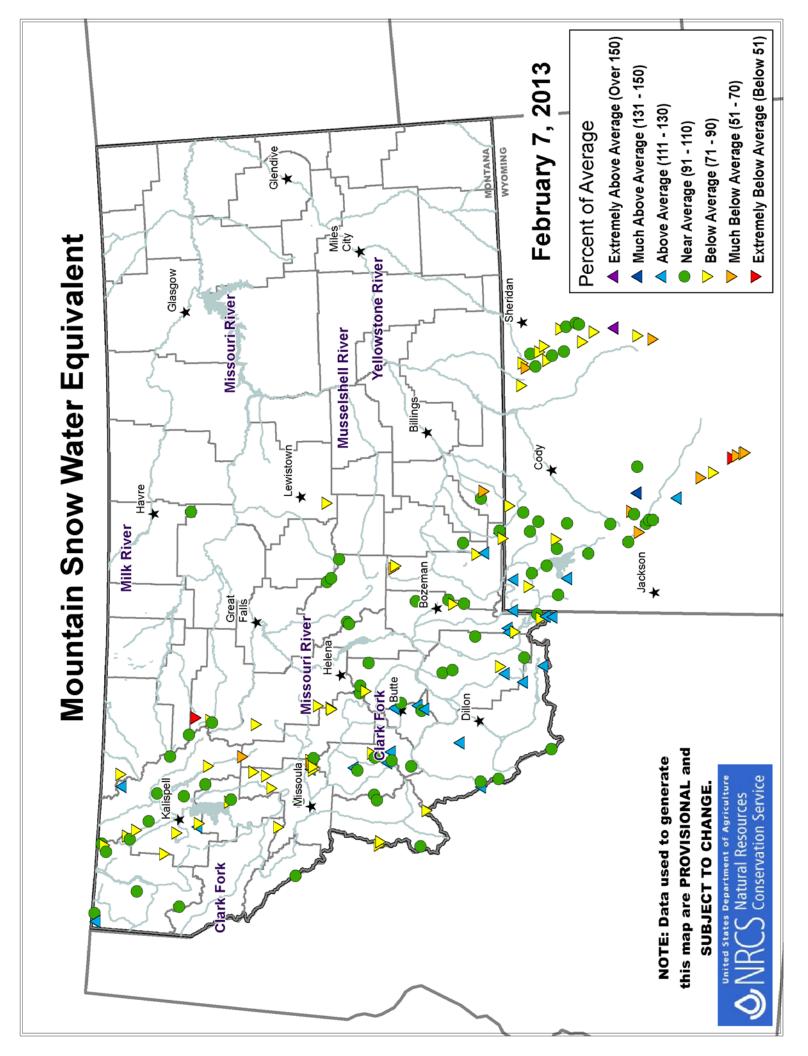
Following are streamflow forecasts for the period April 1 through July 31. THE FIGURES IN THE TABLE BELOW ARE AN AVERAGE OF ALL FORECASTS WITHIN THE PARTICULAR BASIN AT THE 50 PERCENT EXCEEDANCE ONLY. FOR FORECASTS ABOVE AND BELOW THE 50 PERCENT EXCEEDANCE, LOOK TO THE SPECIFIC BASIN REPORTS.

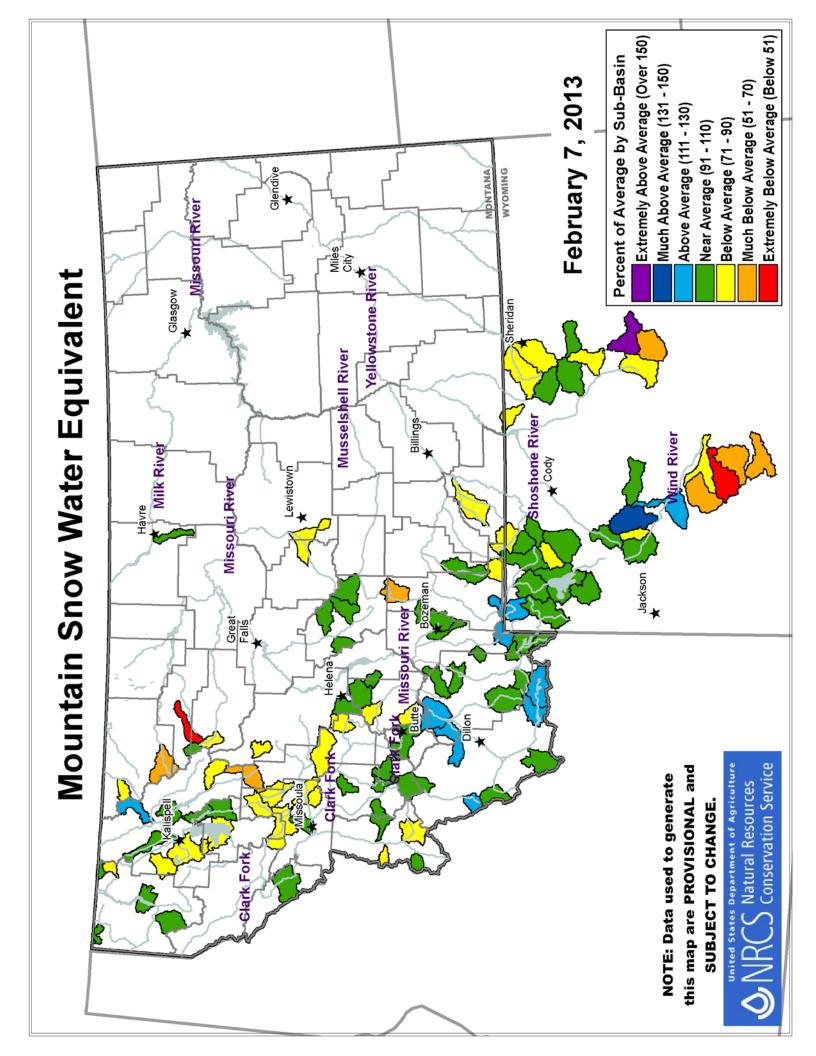
| | April-July | April-July |
|--------------------------|---------------------------|---------------------------|
| RIVER BASIN | THIS YEAR % OF AVERAGE | LAST YEAR % OF AVERAGE |
| RIVER BASIN | % OF AVERAGE | 6 OF AVERAGE |
| COLUMBIA | . 98 | 92 |
| KOOTENAI | . 102 | 86 |
| FLATHEAD | . 103 | 89 |
| UPPER CLARK FORK | . 97 | 98 |
| BITTERROOT | . 88 | 99 |
| LOWER CLARK FORK | . 90 | 87 |
| MISSOURI | . 94 | 84 |
| JEFFERSON | . 92 | 72 |
| MADISON | . 96 | 83 |
| GALLATIN | . 96 | 85 |
| MISSOURI MAINSTEM | . 94 | 82 |
| SMITH-JUDITH-MUSSELSHELL | . 91 | 83 |
| SUN-TETON-MARIAS | . 95 | 101 |
| MILK | . 105 | 90 |
| ST. MARY | . 101 | 106 |
| YELLOWSTONE | . 85 | 98 |
| UPPER YELLOWSTONE | . 91 | 91 |
| LOWER YELLOWSTONE | . 79 | 105 |
| STATE-WIDE | . 94 | 91 |

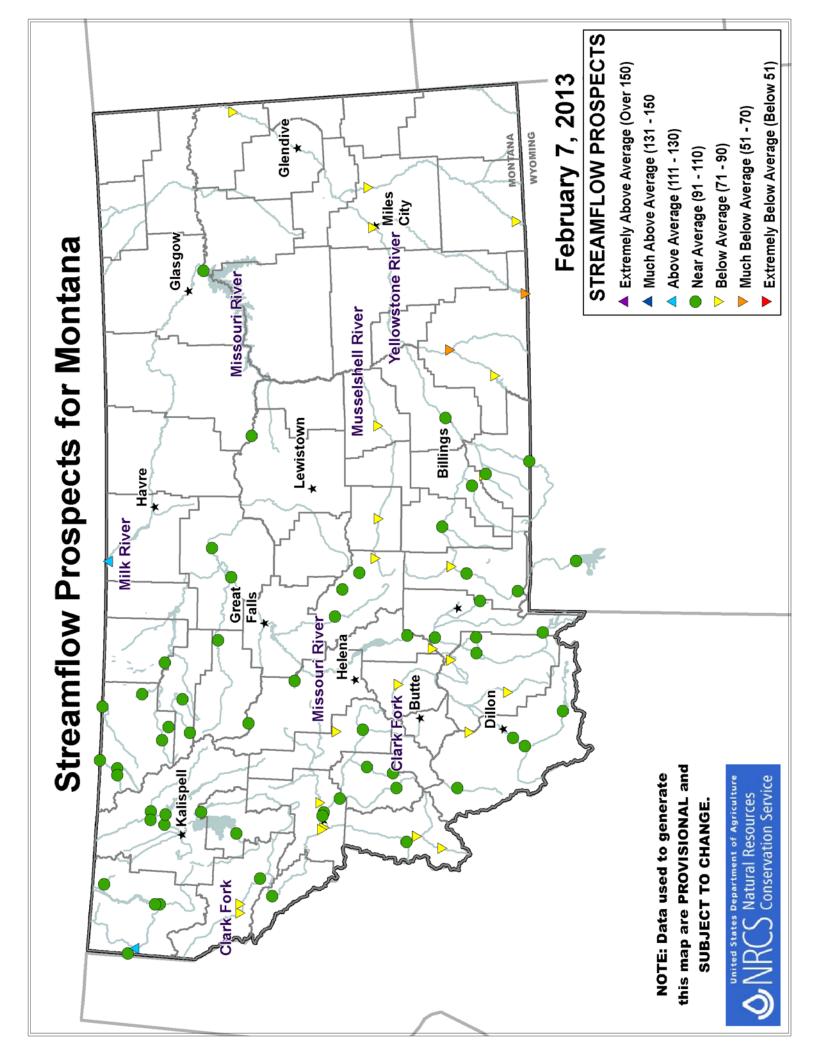
NOTE: The APRIL-JULY LAST YEAR % OF AVERAGE column above is what was forecast last year at this same time, NOT what actually occurred.

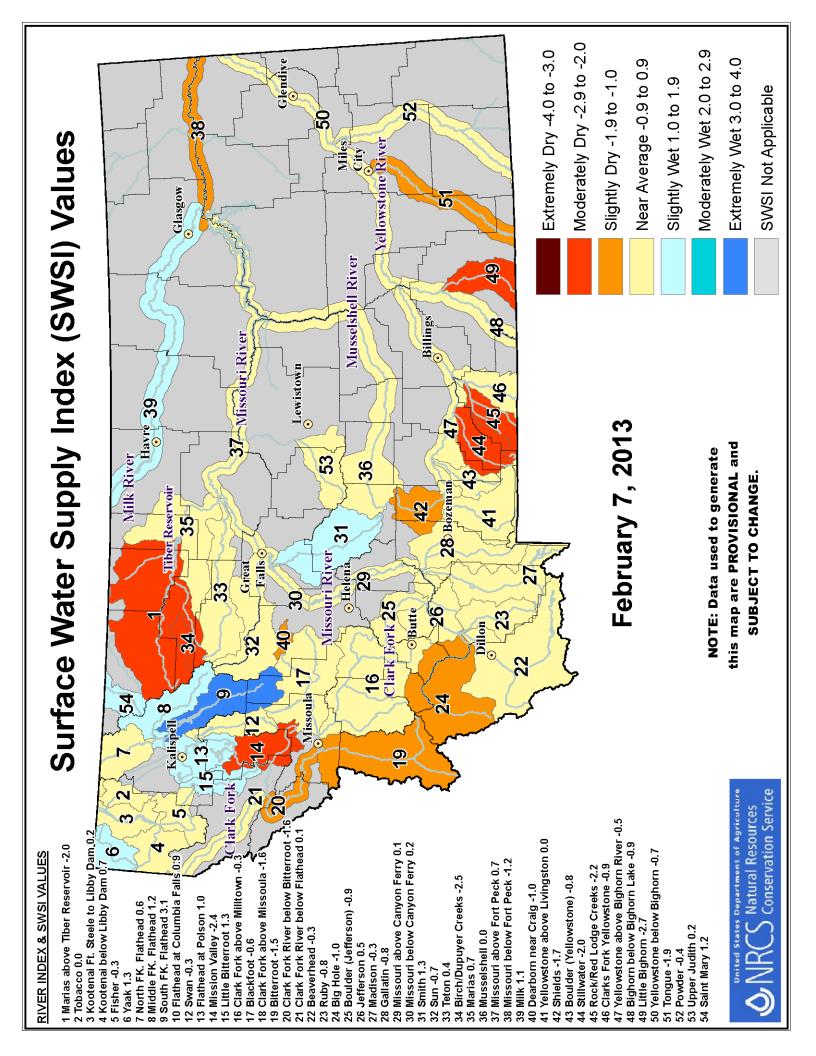
Surface Water Supply Index The Surface Water Supply Index (SWSI) is a measure of available surface water availability for the spring and summer months. Water users that rely on mountain precipitation can use the index to evaluate seasonal surface water supplies. The SWSI accounts for mountain snowpack, mountain precipitation, streamflow, reservoir storage, and soil moisture.

| | SWSI RATI | ING SURFACE WATER CONDITION |
|--------------|--------------|--|
| | +3.0 to + | 4.0 Extremely Wet |
| | +2.0 to + | 3.0 Moderately Wet |
| | +1.0 to + | 5 1 |
| | -1.0 to + | |
| | -1.0 to - | 5 1 1 |
| | -2.0 to - | |
| | -3.0 to - | 4.0 Extremely Dry |
| This Year | Last Year | |
| SWSI | SWSI | Basin |
| | | |
| 0.0 | -0.8 | Tobacco River |
| +0.2 +0.7 | -1.1 +0.6 | Kootenai Ft. Steele to Libby Dam Kootenai River below Libby Dam |
| -0.3 | +0.0 | Fisher River |
| +1.3 | +0.8 | Yaak River |
| +0.6 | -1.4 | North Fork Flathead River |
| +1.2 | -0.6 | Middle Fork Flathead River |
| +3.1 | -0.2 | South Fork Flathead River |
| +0.9 | -0.7 | Flathead River at Columbia Falls |
| -0.3 | -1.4 | Swan River |
| +1.0 | -2.6 | Flathead River at Polson |
| -2.4 +1.3 | -1.9 +0.9 | Mission Valley Little Bitterroot River |
| -0.3 | +0.9 | Clark Fork River above Milltown |
| -1.6 | +0.6 | Clark Fork above Missoula |
| -0.6 | +0.5 | Blackfoot River |
| -1.5 | +0.6 | Bitterroot River |
| -1.6 | +0.6 | Clark Fork River below Bitterroot River |
| +0.1 | -1.4 | Clark Fork River below Flathead River |
| -0.3 | +0.2 | Beaverhead River |
| -0.8 -1.0 | -0.7 -0.9 | Ruby River Big Hole River |
| -0.9 | +0.2 | Boulder River (Jefferson) |
| +0.5 | -0.6 | Jefferson River |
| -0.3 | -1.3 | Madison River |
| -0.8 | -0.8 | Gallatin River |
| +0.1 | 0.0 | Missouri River above Canyon Ferry |
| +0.2 | +0.1 | Missouri River below Canyon Ferry |
| +1.3 -0.7 | +2.9 +0.7 | Smith River Sun River |
| +0.4 | +0.7 | Teton River |
| -2.5 | +1.4 | Birch/Dupuyer Creeks |
| +0.2 | +2.0 | Upper Judith River |
| -2.0 | +0.3 | Marias River above Tiber |
| +0.7 | +2.1 | Marias River below Tiber |
| 0.0 | +1.2 | Musselshell River |
| +0.7 | +0.9 | Missouri River above Ft. Peck |
| -1.2 | +0.2 | Missouri River below Ft. Peck |
| +1.2 +1.1 | +1.6 +2.1 | St. Mary River Milk River |
| -1.0 | +0.7 | Dearborn River near Craig |
| 0.0 | +0.1 | Yellowstone River above Livingston |
| -1.7 | -1.7 | Shields River |
| -0.8 | -1.4 | Boulder River (Yellowstone) |
| -2.0 | -1.0 | Stillwater River |
| -2.2 | +0.8 | Rock/Red Lodge Creeks |
| -0.9 | +0.7 | Clarks Fork River |
| -0.5 | 0.0 | Yellowstone River above Bighorn River |
| -0.9 -2.7 | +0.1 +2.0 | Bighorn River below Bighorn Lake Little Bighorn River |
| -0.7 | +0.1 | Yellowstone River below Bighorn River |
| -1.9 | +2.7 | Tongue River |
| -0.4 | +1.7 | Powder River |
| | | |









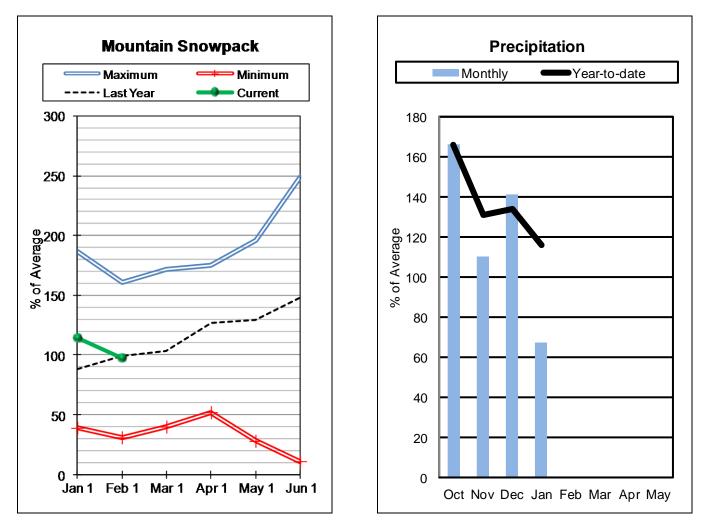
BASIN SUMMARY OF SNOW COURSE DATA

FEBRUARY 2013

| SNOW COURSE | | | DEPTH | CONTENT | YEAR | 81-10 |
|--|--------|---------|-------|---------|------|-------|
| ALBRO LAKE SNOTEL | 8300 | 2/01/13 | 37 | 10.4 | 9.1 | 11.0 |
| ASHLEY DIVIDE | 4820 | 1/31/13 | 16 | 3.2 | 4.4 | 4.5 |
| BADGER PASS SNOTEL | 6900 | 2/01/13 | 71 | 19.7 | 24.6 | 19.5 |
| BANFIELD MTN SNOTEL | 5600 | 2/01/13 | 43 | 12.5 | 13.1 | 12.1 |
| BARKER LAKES SNOTEL | 8250 | 2/01/13 | 37 | 8.9 | 6.8 | 8.0 |
| BASIN CREEK SNOTEL | | | | 4.2 | | |
| BEAGLE SPGS SNOTEL | | 2/01/13 | | | 3.9 | 5.2 |
| BEAVER CREEK SNOTEL | | 2/01/13 | | 13.2 | 7.5 | 11.5 |
| BISSON CREEK SNOTEL | | 2/01/13 | 20 | 47 | 63 | 63 |
| BLACK BEAR SNOTEL | 7950 | 2/01/13 | 92 | 26.4 | 22.8 | 23.3 |
| BLACK PINE SNOTEL | 7100 | 2/01/13 | 31 | 6.2 | 8.3 | 6.2 |
| BLACKTAIL | 5650 | 1/31/13 | 28 | 7.5 | | 8.8 |
| BLACKTAIL MTN SNOTE | L 5650 | 2/01/13 | 31 | 7.6 | 8.6 | |
| BLOODY DICK SNOTEL | 7550 | 2/01/13 | 36 | 8.3 | 7.1 | 7.6 |
| BOULDER MTN SNOTEL | | 2/01/13 | | 12.8 | | |
| BOX CANYON SNOTEL | 6700 | 2/01/13 | | 4.7 | 56 | 5.8 |
| BRACKETT CR SNOTEL | 7320 | 2/01/13 | | 11.9 | 7.2 | 11.4 |
| BURNT MTN SNOTEL | 5880 | 2/01/13 | | 2.4 | 4.6 | 2.4 |
| CALVERT CR SNOTEL | 6430 | 2/01/13 | 25 | 5.5 | 8.4 | 5.5 |
| CARROT BASIN SNOTEL | 9000 | 2/01/13 | 67 | 18.6 | 13.2 | 16.7 |
| CHICKEN CREEK | | 1/29/13 | 37 | 8.9 | 8.2 | 10.8 |
| CLOVER MDW SNOTEL | 8800 | 2/01/13 | 41 | 8.5 | 8.2 | 10.3 |
| COLE CREEK SNOTEL | 7850 | 2/01/13 | 23 | 5.6 | 10.4 | 8.4 |
| COMBINATION SNOTEL | | 2/01/13 | | 3.4 | | |
| COPPER BOTTOM SNOTE | | 2/01/13 | | | 6.4 | |
| COPPER CAMP SNOTEL | 6950 | 2/01/13 | | | 38.2 | |
| COPPER MOUNTAIN | 7700 | 1/20/13 | 24 | 5.0 | 50 | 6.2 |
| COPPER CAMP SNOTEL COPPER MOUNTAIN COYOTE HILL | 4200 | 2/01/13 | 23 | 4.8 | 6.6 | 6.0 |
| CRYSTAL LAKE SNOTEL | 6050 | 2/01/13 | 34 | 6.4 | 7.3 | 7.4 |
| DAISY PEAK SNOTEL | | 2/01/13 | | 5.4 | 5.9 | 5.9 |
| DALY CREEK SNOTEL | 5780 | 2/01/13 | 30 | 7.0 | 7.8 | 6.6 |
| DARKHORSE LK. SNOTE | L 8700 | 2/01/13 | 74 | 20.1 | 15.1 | 17.6 |
| DEADMAN CR SNOTEL | 6450 | 2/01/13 | 28 | 6.1 | 6.5 | 6.5 |
| DISCOVERY BASIN | 7050 | 1/30/13 | 32 | 5.4 | 6.4 | 5.9 |
| DIVIDE SNOTEL DIX HILL | 7800 | 2/01/13 | 31 | 7.0 | 4.6 | 6.2 |
| DIX HILL | 6400 | 1/25/13 | 18 | 4.9 | 9.9 | 6.6 |
| DUPUYER CREEK SNOTE | L 5750 | 2/01/13 | 12 | 2.1 | 5.1 | 5.0 |
| EMERY CREEK SNOTEL | 4350 | 2/01/13 | | 9.2 | 7.8 | 9.5 |
| FISH CREEK | 8000 | 1/31/13 | 31 | 6.1 | 4.6 | 5.5 |
| FISHER CREEK SNOTEL | 9100 | 2/01/13 | 82 | 23.3 | 22.8 | 20.6 |
| FLATTOP MTN SNOTEL | 6300 | 2/01/13 | 107 | 32.1 | 28.8 | 28.5 |
| FROHNER MDWS SNOTEL | 6480 | 2/01/13 | 19 | 4.5 | 6.8 | 4.5 |
| GARVER CREEK SNOTEL | 4250 | 2/01/13 | 27 | 6.6 | 9.0 | 6.8 |
| GRAVE CRK SNOTEL | 4300 | 2/01/13 | 39 | 9.4 | 9.9 | 10.9 |
| HAND CREEK SNOTEL | 5030 | 2/01/13 | 26 | 5.9 | 6.8 | 7.7 |
| HAWKINS LAKE SNOTEL | 6450 | 2/01/13 | 59 | 19.2 | 21.8 | 16.1 |
| HEBGEN DAM | 6550 | 2/01/13 | 27 | 6.0 | 5.0 | 6.8 |
| HELL ROARING DIVIDE | 5770 | 1/28/13 | 61 | 19.4 | 17.4 | 19.9 |
| HERRIG JUNCTION | 4850 | 1/29/13 | 54 | 14.3 | 13.2 | 17.6 |
| HOLBROOK | 4530 | 1/30/13 | 20 | 3.5 | 5.5 | 6.0 |
| HOODOO BASIN SNOTEL | | 2/01/13 | 93 | 24.9 | 29.5 | 26.3 |
| KRAFT CREEK SNOTEL | 4750 | 2/01/13 | 30 | 6.8 | 9.4 | |
| LAKEVIEW RDG. SNOTE | | 2/01/13 | 27 | 7.8 | 3.7 | 6.5 |
| LEMHI RIDGE SNOTEL | 8100 | 2/01/13 | 32 | 6.1 | 5.0 | 6.4 |
| LICK CREEK SNOTEL | 6860 | 2/01/13 | 27 | 5.3 | 7.2 | 5.9 |
| LONE MOUNTAIN SNOTE | | 2/01/13 | 48 | 11.6 | 9.5 | 11.2 |
| LOWER TWIN SNOTEL | 7900 | 2/01/13 | 42 | 10.8 | 9.2 | 11.0 |

| SNOW COURSE | | | DEPTH | CONTENT | YEAR | 71-00 |
|--|--------------|--|------------|---------------------|----------------------------|-------------|
| LUBRECHT SNOTEL | 4680 | 2/01/13 | 12 | 3.0 | 6.5 | 3.8 |
| LUBRECHT FOREST NO 3 | | | | | | |
| LUBRECHT FOREST NO 4 | 4650 | | | 1.4 | | |
| LUBRECHT FOREST NO 6 | | | | 2.6 | | |
| LUBRECHT HYDROPLOT | | | | 2.2 | | |
| MADISON PLT SNOTEL | 7750 | 2/01/13 | 60 | 15.8 | | 14.1 |
| MANY GLACIER SNOTEL | 4900 | 2/01/13 | 26 | 6.8 | | |
| MARIAS PASS | 5250 | 1/29/13 | 35 | 9.8 | 11.3 | |
| MONUMENT PK SNOTEL | 8850 | 2/01/13 1/29/13 2/01/13 2/01/13 | 58 | 14.7 | 10.2 | |
| MOSS PEAK SNOTEL | | 2/01/13 | .78 | 22.9 | 21.7 | 21.7 |
| MOULTON RESERVOIR | | | | 4.9 | | |
| MT LOCKHART SNOTEL | | | | | 16.9 | |
| MULE CREEK SNOTEL | | | | 10.1 | | |
| N.E. ENTRANCE SNOTEI | | | | 5.0 | | |
| NEVADA RIDGE SNOTEL | 6900 | 2/01/13 | 32 | 7.6 | 12.8 | 8.0 |
| NEW WORLD | | 2/01/13 | | 7.3 7.8 | 9.4 | 7.8 8.6 |
| NEZ PERCE CMP SNOTEI N.F. ELK CR SNOTEL | 5050 6250 | 2/01/13 | 20 | 6.2 | 8.8 | |
| N.F. ELK CR SNOTEL NF JOCKO SNOTEL | 6330 | 2/01/13 2/01/13 2/01/13 | ∠0 27 | 6.2 24.0 | 8.8 21.6 | 27.1 |
| NOISY BASIN SNOTEL | 6040 | 2/01/13 | 0 / Q Q | 24.0 | 21.0 16 Q | 25.4 |
| OPHIR PARK | | | | 6.8 | | 25.4 8.7 |
| PETERSON MDW SNOTEL | | | | 6.2 | | |
| PICKFOOT CRK SNOTEL | | | | 7.1 | | |
| PIKE CREEK SNOTEL | | | | | | |
| PIPESTONE PASS | 7200 | 1/26/13 | | | | |
| PLACER BASIN SNOTEL | 8830 | 2/01/13 | 50 | 10.6 | 2.2 10.8 27.4 3 3 | 10.5 |
| PLACER BASIN SNOTEL POORMAN CR SNOTEL | 5100 | 2/01/13 | 73 | 22.9 | 27.4 | 23.4 |
| PORCUPINE SNOTEL | 6500 | 2/01/13 | 15 | 10.6 22.9 2.6 | 3.3 | 4.1 |
| ROCKER PEAK SNOTEL | | 2/01/13 | 31 | 6.7 | 9.0 | 8.2 |
| ROCKY BOY SNOTEL | 4700 | 2/01/13 | 19 | 3.4 | 1.7 | 3.2 |
| SACAJAWEA SNOTEL | 6550 | 2/01/13 | 39 | 8.3 | 4.8 | 8.9 |
| SADDLE MTN SNOTEL | 7900 | 2/01/13 | 51 | 14.1 | 16.2 | 15.8 |
| S.F. SHIELDS SNOTEL | 8100 | 2/01/13 | 31 | 6.6 | 7.0 | 9.2 |
| SHORT CREEK SNOTEL | 7000 | 2/01/13 | 17 | 4.1 | 3.5 | 3.6 |
| SHOWER FALLS SNOTEL SKALKAHO SNOTEL | 8100 | 2/01/13 2/01/13 | 58 | 11.4 | 11.5 | 12.1 |
| SKALKAHO SNOTEL | | | | | 15.7 | 14.0 |
| SLEEPING WOMAN SNTL | 6150 | 2/01/13 | 36 | 8.3 | 12.1 | 9.6 |
| SPOTTED BEAR MTN. | 7000 | 1/31/13 | 28 | 7.0 | 9.4 | 8.7 |
| SPUR PARK SNOTEL | 8100 | 2/01/13 | 52 | 13.7 | 14.8 | 12.8 |
| STAHL PEAK SNOTEL | 6030 | 2/01/13 | 76 | 20.0 | 19.2 | 22.1 |
| STORM LAKE | 7780 | 1/30/13 | 36 | 7.0 | 7.8 | 7.4 |
| STRYKER BASIN | 6180 | 1/29/13 | 65 | 19.2 | 14.7 | 19.6 |
| STUART MOUNTAIN SNTI | | 2/01/13 | 70 | 20.5 | 21.3 | 20.4 |
| TEN MILE LOWER | 6600 6800 | 2/01/13 | 24 | 5.2 | 5.8 | 4.0 |
| TEN MILE MIDDLE | 6800 8000 | 2/01/13 | 27 | 5.8 | 7.0 | 6.0 8 5 |
| TEPEE CREEK SNOTEL | 8000 6840 | 2/01/13 | 38 | 9.0 | 6.4 | 8.5 |
| TIZER BASIN SNOTEL TRINKUS LAKE | 6840 6100 | 2/01/13 2/02/13 | 25 85 | 5.5 25.7 | 6.6 23.7 | 6.0 25.2 |
| TRINKUS LAKE TRUMAN CREEK | 4060 | 2/02/13 | | 25.7 3.2 | 4.4 | 25.2 |
| TWELVEMILE SNOTEL | 5600 | 2/01/13 | 38 | 9.1 | 4.4 | 11.0 |
| TWENTY-ONE MILE | 7150 | 2/01/13 | 47 | 13.0 | 9.0 | 10.0 |
| TWENTI ONE MILE TWIN LAKES SNOTEL | 6400 | 2/01/13 | 72 | 19.8 | 25.8 | 24.9 |
| UPPER HOLLAND LAKE | 6200 | 2/01/13 | 65 | 17.6 | 19.1 | 20.6 |
| WALDRON SNOTEL | 5600 | 2/01/13 | 25 | 5.6 | 10.0 | 6.6 |
| WARM SPRINGS SNOTEL | 7800 | 2/01/13 | 46 | 10.9 | 13.6 | 12.3 |
| WEASEL DIVIDE | 5450 | 1/30/13 | 64 | 18.9 | 20.2 | 20.6 |
| WEST YELL'ST SNOTEL | | 2/01/13 | 27 | 6.4 | 7.0 | 7.0 |
| WHISKEY CREEK SNOTEI | | 2/01/13 | 38 | 7.8 | 9.3 | 9.6 |
| WHITE MILL SNOTEL | 8700 | 2/01/13 | | 14.8 | 14.0 | 14.6 |
| WOOD CREEK SNOTEL | 5960 | 2/01/13 | 22 | 4.7 | 6.8 | 5.8 |
| | | | | | | |

Kootenai River Basin in Montana



Snowpack conditions in the Kootenai River Basin as of February 1 were near normal. Snow water content was 97 percent of median and 92 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 67 percent of average and 63 percent of last year. Water year precipitation, beginning October 1, 2012, was 116 percent of average and 117 percent of last year.

Lake Koocanusa storage at the end of January was 112 percent of average and 86 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 102 percent.

| | | KOOTENAI | RIVER BASI | N in Montana | | | | | |
|------------------------------|--|---------------------------|--|---------------------------|-------------------------|---------------------------|---------------------------|---------------------------|--|
| | | Streamflow | / Forecasts · | - February 1, | 2013 | | | | |
| | | | | | | | | | |
| | | <<====== | <<===== Drier ===== Future Conditions ====== Wetter ====>> | | | | | | |
| | | | | | | | | | |
| Forecast Point | Forecast | 1 | | | | | | | |
| | Period | 90% | 70% | - | 0% | 30% | 10% | 30-Yr Avg. | |
| | | (1000AF) | (1000AF) | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF) | |
| | | | | ============ | | | | | |
| Tobacco R nr Eureka | APR-JUL | 97 | 114 | 125 | 99 | 136 | 153 | 126 | |
| | APR-SEP | 106 | 125 | 138 | 99 | 151 | 170 | 140 | |
| | | | | | | | | | |
| Libby Reservoir Inflow (1,2) | APR-JUL | 4480 | 5110 | 5390 | 101 | 5670 | 6300 | 5340 | |
| | APR-SEP | 5420 | 6000 | 6270 | 100 | 6540 | 7120 | 6250 | |
| | | | | | | ĺ | | | |
| Fisher River nr Libby | APR-JUL | 128 | 171 | 200 | 98 | 230 | 270 | 205 | |
| | APR-SEP | 140 | 185 | 215 | 98 | 245 | 290 | 220 | |
| | | | | ĺ | | ĺ | | | |
| Yaak River nr Troy | APR-JUL | 365 | 425 | 465 | 111 | 505 | 565 | 420 | |
| | APR-SEP | 385 | 445 | 485 | 110 | 525 | 585 | 440 | |
| | | | | | | 1 | | | |
| Kootenai R at Leonia (1,2) | APR-JUL | 5430 | 6270 | 6650 | 101 | 7030 | 7870 | 6600 | |
| | APR-SEP | 6430 | 7230 | 7600 | 100 | 7970 | 8770 | 7590 | |
| | | | | | | ĺ | | | |
| - Yaak River nr Troy | APR-SEP APR-JUL APR-SEP APR-JUL | 140 365 385 5430 | 185 425 445 6270 | 215 465 485 6650 | 98 111 110 101 | 245 505 525 7030 | 290 565 585 7870 | 220 420 440 6600 | |

 AFR-SEP
 0430
 7230
 7600
 100
 7970
 8770
 7590

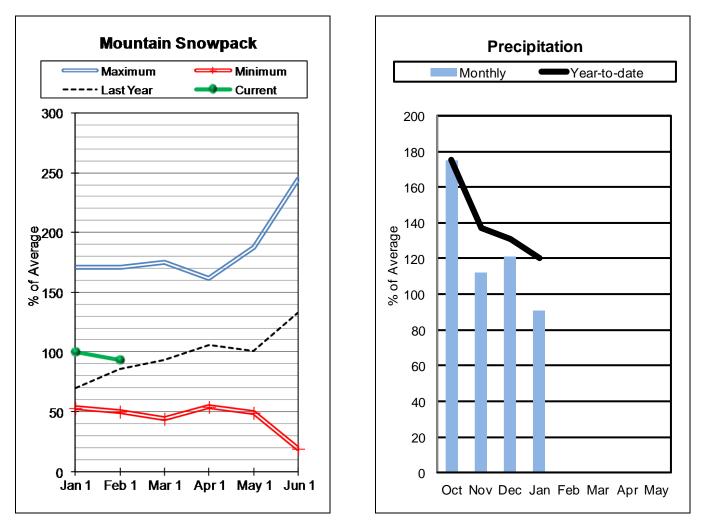
 KOOTENAI RIVER BASIN in Montana
 KOOTENAI RIVER BASIN in Montana
 KOOTENAI RIVER BASIN in Montana
 Reservoir Storage (1000 AF) - End of January
 Watershed Snowpack Analysis - February 1, 2013

| Reservoir Scorage (1000 AF) - End of January | | | | | Watershed Showpack Analysis - February 1, 2015 | | | |
|--|----------------------|--------|----------------------------|----------------|--|---------------------------|----------------------------------|-----|
| | | | | | | | | |
| Reservoir | Usable Capacity | | able Stora Last Year | age *** Avg | Watershed | Number of ata Sites | This Year ======== Last Yr | |
| LAKE KOOCANUSA | 5748.0 | 3219.0 | 3723.0 | 2865.0 | KOOTENAY in CANADA | 2 | 80 | 94 |
| | | | | | KOOTENAI MAINTSTEM | 3 | 92 | 99 |
| | | | | | TOBACCO | 3 | 98 | 90 |
| | | | | | FISHER | 1 | 87 | 77 |
| | | | | | УААК | 2 | 84 | 113 |
| | | | | | KOOTENAI in MONTANA | 9 | 92 | 97 |
| | | | | | KOOTENAI ab BONNERS FERRY | Y 11 | 90 | 96 |

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Flathead River Basin



Snowpack conditions in the Flathead River Basin were near normal on February 1. Snow water content was 93 percent of median and 99 percent of last year.

Mountain precipitation during January was 91 percent of average and 78 percent of last year. Water year precipitation, beginning October 1, 2012, was 120 percent of average and 118 percent of last year.

Hungry Horse Reservoir storage at the end of January was 125 percent of average and 103 percent of last year. Flathead Lake storage at the end of January was 101 percent of average and 103 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 103 percent.

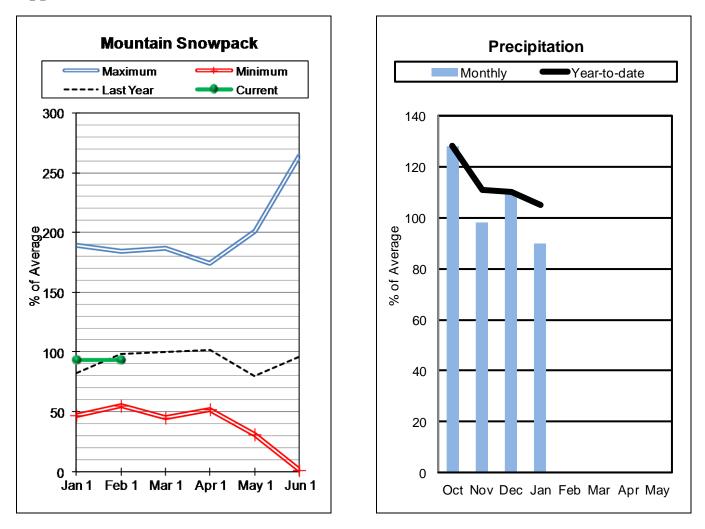
| | | | ATHEAD RIVE | | 0010 | | | |
|-------------------------------------|--------------------|------------|-------------|-----------------------|------------|---------------------------------------|------------|------------|
| | | | | - February 1, | | | | |
| | | | | | | ====== Wetter | | |
| | | ĺ | | | | | i | |
| Forecast Point | Forecast | | | | | | | |
| | Period | 90% | 70% | - | 50% | 30% | 10% | 30-Yr Avg. |
| | | (1000AF) | (1000AF) | | (% AVG.) | (1000AF) | (1000AF) | (1000AF) |
| NF Flathead R nr Columbia Falls | APR-JUL | 1370 | 1520 | =========== 1620 | 105 | ===================================== | 1870 | 1540 |
| NF FIACHEAG R HE COLUMDIA FAILS | APR-JUL APR-SEP | 1530 | 1690 | 1790 | 105 | 1890 | 2050 | 1700 |
| | AFR SEF | 1000 | 1000 | 1 1/50 | 105 | 1 1050 | 2050 | 1700 |
| MF Flathead R nr West Glacier | APR-JUL | 1370 | 1540 | 1650 | 110 | 1760 | 1930 | 1500 |
| | APR-SEP | 1500 | 1670 | 1790 | 110 | 1910 | 2080 | 1630 |
| | | | | | | | | |
| SF Flathead R nr Hungry Horse | APR-JUL | 1060 | 1190 | 1280 | 109 | 1370 | 1500 | 1180 |
| | APR-SEP | 1130 | 1270 | 1360 | 108 | 1450 | 1590 | 1260 |
| Hungry Horse Reservoir Inflow (1,2) | APR-JUL | 1630 | 1900 | 2030 | 109 | 2160 | 2430 | 1860 |
| hungry horse keservoir inflow (1,2) | APR-SEP | 1740 | 2030 | 2050 | 109 | 2290 | 2580 | 1980 |
| | | | | | | | | |
| Flathead R at Columbia Falls (2) | APR-JUL | 4620 | 5090 | 5400 | 108 | 5710 | 6180 | 5020 |
| | APR-SEP | 5050 | 5530 | 5860 | 108 | 6190 | 6670 | 5450 |
| | | | | | | | | |
| Ashley Ck nr Marion (2) | APR-JUL | 4.2 0.5 | 5.6 | 6.6 | 102 108 | 7.6 | 9.0 2.1 | 6.5 |
| | MARCH | 0.5 | 1.0 | 1.3 | 108 | 1.6 | 2.1 | 1.2 |
| Swan R nr Bigfork | APR-JUL | 430 | 485 | 525 | 101 | 565 | 620 | 520 |
| bwaii k iir bigroik | APR-SEP | 495 | 555 | 600 | 101 | 645 | 705 | 595 |
| | | | | İ | | İ | | |
| Flathead Lake Inflow (1,2) | APR-JUL | 5030 | 5870 | 6250 | 108 | 6630 | 7470 | 5810 |
| | APR-SEP | 5450 | 6340 | 6750 | 108 | 7160 | 8050 | 6270 |
| Mill Ck ab Bassoo Ck nr Niarada | ADD THE | 2.2 | 2 0 | 2.0 | 0.0 | | 5.6 | 4 0 |
| MIII CK ab Bassoo CK nr Niarada | APR-JUL APR-SEP | 2.2 | 3.2 3.6 | 3.9 | 98 98 | 4.6 | 5.0 | 4.0 4.4 |
| | APR-SEP | 2.0 | 5.0 | 1 4.5 | 50 | 5.0 | 0.0 | 4.4 |
| South Crow Ck nr Ronan | APR-JUL | 7.6 | 9.0 | 10.0 | 99 | 11.0 | 12.4 | 10.1 |
| | APR-SEP | 8.7 | 10.3 | 11.4 | 98 | 12.5 | 14.1 | 11.6 |
| | | | | İ | | İ | | |
| Mission Ck nr St. Ignatius | APR-JUL | 21 | 23 | 25 | 100 | 27 | 29 | 25 |
| | APR-SEP | 25 | 28 | 30 | 100 | 32 | 35 | 30 |
| Sf Jocko R nr Arlee | APR-JUL | 24 | 29 | 32 | 97 | 35 | 40 | 33 |
| DI DOCKO K III ALLEE | APR-JUL APR-SEP | 24 | 32 | 36 | 97 | 35 40 | 40 | 33 |
| | | 2. | 52 | | 2. | 1 | 10 | 57 |
| NF Jocko R bl Tabor Feeder Canal | APR-JUL | 25 | 28 | 30 | 97 | 32 | 35 | 31 |
| | APR-SEP | 27 | 30 | 32 | 97 | 34 | 37 | 33 |
| | | | | | | | | |
| | | | | | | | | |

| | HEAD RIVER BASIN | | | | FLATHEAD RIVER BASIN Watershed Snowpack Analysis - February 1, 2013 | | | | |
|--------------------|------------------|--------------|--------------|----------------------|--|------------------|--------------------|---------|--|
| Reservoir Storage | (1000 AF) - End | l of Janua | ary | | Watershed Snowpack | Analysis - | February . | L, 2013 | |
| | Usable | | able Stora | ========= age *** | | Number of | This Year | | |
| Reservoir | Capacity | This Year | Last Year | Avg | Watershed D | oI Data Sites | ======= Last Yr | Median | |
| CAMAS (4) | 45.2 | 26.9 | 26.0 | 18.2 | NF FLATHEAD in CANADA | 0 | 0 | 0 | |
| LOWER JOCKO LAKE | 6.4 | 0.0 | 0.0 | 0.0 | NF FLATHEAD in MONTANA | 7 | 101 | 94 | |
| MISSION VALLEY (8) | 100.0 | 21.9 | 32.0 | 30.9 | MIDDLE FORK FLATHEAD | 5 | 94 | 90 | |
| HUNGRY HORSE | 3451.0 | 2973.3 | 2896.0 | 2375.0 | SOUTH FORK FLATHEAD | 6 | 110 | 95 | |
| FLATHEAD LAKE | 1791.0 | 966.5 | 933.9 | 955.6 | STILLWATER-WHITEFISH | 6 | 110 | 89 | |
| | | | | | SWAN | 5 | 111 | 98 | |
| | | | | | MISSION VALLEY | 3 | 97 | 95 | |
| | | | | | LITTLE BITTERROOT-ASHLEY | ζ 3 | 83 | 86 | |
| | | | | | JOCKO | 3 | 96 | 92 | |
| | | | | | FLATHEAD in MONTANA | 27 | 99 | 91 | |
| | | | | | FLATHEAD RIVER BASIN | 27 | 99 | 91 | |

i * 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Upper Clark Fork River Basin



Snowpack conditions in the Upper Clark Fork River Basin were near normal on February 1. Snow water content was 93 percent of median and 81 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 90 percent of average and 70 percent of last year. Water year precipitation, beginning October 1, 2012, was 105 percent of average and 96 percent of last year.

East Fork Rock Creek storage was 123 percent of average and 83 percent of last year; and Nevada Creek storage was 96 percent of average and 67 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 97 percent.

| |
|------|
| |

UPPER CLARK FORK RIVER BASIN Streamflow Forecasts - February 1, 2013

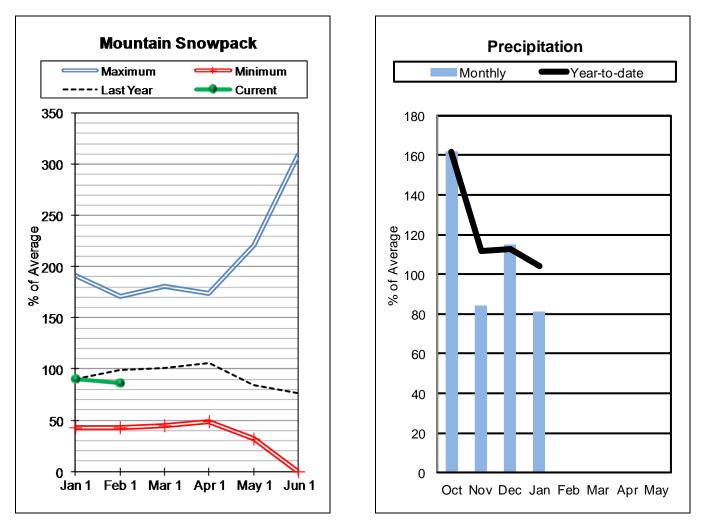
| | | | w Forecasts | | | | | | |
|---|--------------------|------|-----------------|----------------|----------------|---------------|--|-----------------|------------------------|
| | | | | | | | ====== Wetter | | |
| | | ļ | | | | | | | |
| Forecast Point | Forecast Period | 90% | 70% | == Chance | e Of Exe 50 | | ====================================== | ======= 10% | 20 37-2 2 |
| | Period | 1 | /0% (1000AF) | (10) | | « (% AVG.) | | 10% (1000AF) | 30-Yr Avg. (1000AF) |
| | | | | | | | | | |
| Little Blackfoot R nr Garrison | APR-JUL | 36 | 54 | i i | 66 | 94 | 78 | 96 | 70 |
| | APR-SEP | 41 | 60 | | 73 | 95 | 86 | 105 | 77 |
| Flint Ck nr Southern Cross | APR-JUL | 6.2 | 10.1 | 1 | 2.7 | 102 | 15.3 | 19.2 | 12.4 |
| | APR-SEP | 6.8 | 11.7 | 1 | 5.0 | 103 | 18.3 | 23 | 14.6 |
| Flint Ck bl Boulder Ck | APR-JUL | 28 | 43 | | 53 | 102 | 63 | 78 | 52 |
| Fint ck bi bouider ck | APR-SEP | 38 | 56 | | 68 | 102 | 80 | 98 | 66 |
| | | 50 | 50 | | 00 | 200 | | 20 | 00 |
| Lower Willow Ck Reservoir Inflow (2) | APR-MAY | 4.0 | 6.4 | j s | 8.0 | 110 | 9.6 | 12.0 | 7.3 |
| | APR-JUL | 5.8 | 9.5 | 11 | 2.0 | 113 | 14.5 | 18.2 | 10.6 |
| MF Rock Ck nr Philipsburg | APR-JUL | 40 | 50 | | 57 | 98 | 64 | 74 | 58 |
| | APR-SEP | 46 | 57 | | 64 | 99 | 71 | 82 | 65 |
| Rock Ck nr Clinton | APR-JUL | 159 | 210 | | 245 | 98 | 280 | 330 | 250 |
| ROCK CK III CIIIICOII | APR-SEP | 182 | 235 | | 275 | 98 | 315 | 370 | 280 |
| | | | | | | | | | |
| Clark Fork R ab Milltown | APR-JUL | 270 | 415 | -j ! | 515 | 97 | 615 | 760 | 530 |
| | APR-SEP | 335 | 495 | | 605 | 98 | 715 | 875 | 615 |
| Nevada Ck nr Helmville | APR-MAY | 1.4 | 4.7 | | 6.9 | 82 | 9.1 | 12.4 | 8.4 |
| | APR-JUL | 2.7 | 8.1 | 1 | 1.7 | 82 | 15.3 | 21 | 14.2 |
| Blackfoot R nr Bonner | APR-JUL | 440 | 560 | | 640 | 89 | 720 | 840 | 720 |
| | APR-SEP | 500 | 630 | · · | 715 | 89 | 800 | 930 | 800 |
| Clark Fork R ab Missoula | APR-JUL | 750 | 1000 | 1 | 170 | 94 | 1340 | 1590 | 1250 |
| Clark Fork R ad Missoula | APR-JUL APR-SEP | 890 | 1160 | | 170 340 | 94 | 1340 | 1790 | 1420 |
| | | 050 | 1100 | 1 | 510 | 21 | | 2750 | 1120 |
| | | | | ========= | | | | | |
| UPPER CLARK FO Reservoir Storage (1000 | | | 7 | | W. | | CLARK FORK R nowpack Analys | | 1 2013 |
| | | | | ا ========= | | | | | - · |
| | Usable | | le Storage | | | | Numbe | | Year as % of |
| Reservoir | Capacity | This | Last | İ | Waters | hed | of | | |
| | | Year | Year | Avg | | | Data S: | ites Last | Yr Median |
| | | | | i i | | | | | |

| EASI FORK ROCK CREEK | 15.0 | 9.2 | 11.1 | /.5 | CLARK FORK AD FLINI CREEK | 10 | 79 | 93 | |
|----------------------|-----------|------------------|------|-------------------------|---------------------------|----|-----|----|--|
| GEORGETOWN LAKE | | NO REPORT | | FLINT CREEK | 5 | 88 | 101 | | |
| LOWER WILLOW CREEK | NO REPORT | | | | ROCK CREEK | 3 | 88 | 96 | |
| NEVADA CREEK | 12.6 | 12.6 4.8 7.2 5.0 | | CLARK FORK ab BLACKFOOT | 15 | 82 | 95 | | |
| | | | | | BLACKFOOT | 12 | 72 | 88 | |
| | | | | | UPPER CLARK FORK BASIN | 25 | 79 | 93 | |
| | | | | | | | | | |

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Bitterroot River Basin



Snowpack conditions in the Bitterroot River Basin were below normal on February 1. Snow water content was 86 percent of median and 77 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 81 percent of average and 60 percent of last year. Water year precipitation, beginning October 1, 2012, was 104 percent of average and 92 percent of last year.

Como storage was 115 percent of average and 124 percent of last year.

Assuming near average precipitation, April through July streamflows are forecast to average 88 percent.

| BITTERROOT RIVER BASIN | | | | | | | | | | |
|-------------------------------|-------------------|---------------|--------------|-----------------|------------|---------------|--|---------|-------|-----------|
| | | | | | | 2012 | | | | |
| | | Streamilo | w Forecasts | - Febr | ruary 1, 2 | 2013 | | | | |
| | | | - Drior | ====== == Eu | turo Cond | ditiona | ====================================== | ~> | . | |
| | | | - Drier | ru | icure cono | | | | | |
| Forecast Point | Forecast | | | - Chan | oce Of Evo | - * - heading | | | | |
| Porecase Porne | Period | 90% | 70% | | 50% | | 30% | 10% | | -Yr Avq. |
| | 101104 | (1000AF) | (1000AF) | 1 (1 | L000AF) (| - 1 | (1000AF) | (1000AF | | (1000AF) |
| | | ============= | ============ | 1 1 | | | ============ | | | ========= |
| WF Bitterroot R nr Conner (2) | APR-JUL | 61 | 90 | i | 109 | 85 | 128 | 157 | | 128 |
| | APR-SEP | 66 | 98 | i | 120 | 86 | 142 | 174 | | 139 |
| | | | | i | | ĺ | | | | |
| Bitterroot R nr Darby | APR-JUL | 210 | 295 | i | 355 | 87 | 415 | 500 | | 410 |
| | APR-SEP | 270 | 355 | i i | 415 | 88 | 475 | 560 | | 470 |
| | | | | | | | | | | |
| Como Reservoir Inflow (2) | APR-JUL | 58 | 65 | | 70 | 92 | 75 | 82 | | 76 |
| | APR-SEP | 61 | 68 | | 73 | 92 | 78 | 85 | | 79 |
| | | | | | | | | | | |
| Bitterroot R nr Missoula | APR-JUL | 710 | 890 | | 1010 | 88 | 1130 | 1310 | | 1150 |
| | APR-SEP | 790 | 980 | 1 | 1110 | 89 | 1240 | 1430 | | 1250 |
| | | | | | | | | | | |
| | | | | ====== | | | | | | |
| | T RIVER BASI | | | | 17- | | TERROOT RIVE | | | 2012 |
| Reservoir Storage (10 | | | | 1 | | | owpack Analy | | - | |
| | Usable | | le Storage * | | | | Numb | | | as % of |
| Reservoir | Capacity | This | Last. | | Watersh | hed | of | | | as % 01 |
| Keservorr | capacity | Year | | va | Watersi | ieu | Data S | | st Yr | Median |
| | ============= | | | | | | | | | |
| PAINTED ROCKS LAKE | | NO REPOR | т | 1 | WEST FO | ORK BITTERR | | | 36 | 90 |
| | | | - | | | | | | | |
| COMO | 34.9 | 12.6 | 10.2 1 | 1.0 | EAST SI | IDE BITTERR | .00T 3 | 8 | 35 | 93 |
| | | | | i | | | | | | |
| | | | | i | WEST SI | IDE BITTERR | оот 3 | 5 | 1 | 80 |
| | | | | i | | | | | | |

7

BITTERROOT RIVER BASIN

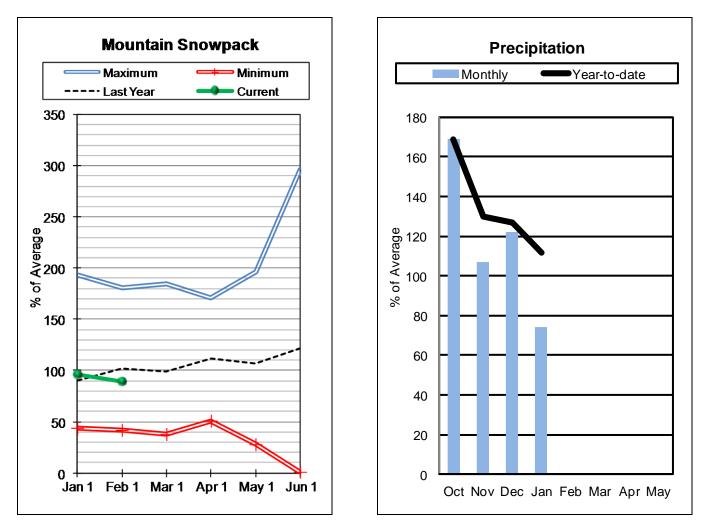
77

86

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Lower Clark Fork River Basin



Snowpack conditions in the Lower Clark Fork River Basin were below above normal on February 1. Snow water content was 89 percent of median and 80 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 74 percent of average and 67 percent of last year. Water year precipitation, beginning October 1, 2012, was 112 percent of average and 114 percent of last year.

Storage at the end of January in Noxon Rapids was 100 percent of average and 100 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 90 percent.

LOWER CLARK FORK RIVER BASIN

Streamflow Forecasts - February 1, 2013

| | <<===== Drier ===== Future Conditions ====== Wetter =====>> | |
|--|---|--|

| Forecast Point | Forecast | ======= | | = Chance Of E | xceeding * | | | |
|-------------------------------------|----------|---------------|----------|--|------------|---|----------|------------|
| | Period | 90% | 70% | 5 | 50% | 30% | 10% | 30-Yr Avg. |
| | | (1000AF) | (1000AF) | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF) |
| | | ============ | | ====================================== | | ======================================= | | |
| Clark Fork R bl Missoula | APR-JUL | 1470 | 1880 | 2160 | 90 | 2440 | 2850 | 2400 |
| | APR-SEP | 1690 | 2130 | 2430 | 91 | 2730 | 3170 | 2670 |
| | | | | İ | | ĺ | | |
| Clark Fork R at St. Regis (1) | APR-JUL | 1800 | 2530 | 2860 | 91 | 3190 | 3920 | 3160 |
| - | APR-SEP | 2100 | 2870 | 3220 | 92 | 3570 | 4340 | 3510 |
| | | | | İ | | ĺ | | |
| Clark Fork R nr Plains (1,2) | APR-JUL | 7130 | 8700 | 9420 | 102 | 10100 | 11700 | 9200 |
| | APR-SEP | 7870 | 9540 | 10300 | 102 | 11100 | 12700 | 10100 |
| | | | | İ | | İ | | |
| Thompson R nr Thompson Falls | APR-JUL | 81 | 118 | 143 | 79 | 168 | 205 | 181 |
| | | | | İ | | İ | | |
| Thompson R Nr Thompson Falls | APR-SEP | 96 | 136 | 163 | 80 | 190 | 230 | 205 |
| | | | | İ | | İ | | |
| Prospect Ck at Thompson Falls | APR-JUL | 52 | 69 | j 80 | 78 | 91 | 108 | 102 |
| | APR-SEP | 57 | 74 | 86 | 78 | 98 | 115 | 110 |
| | | | | ĺ | | | | |
| Clark Fork at Whitehorse Rpds (1,2) | APR-JUL | 8103 | 9820 | 10600 | 101 | 11380 | 13097 | 10500 |
| | APR-SEP | 9052 | 10873 | 11700 | 102 | 12527 | 14348 | 11500 |
| | | | | ĺ | | ĺ | | |
| | | | | | | | | |

| LOWER CLARK FORK RIVER BASIN | LOWER CLARK FORK RIVER BASIN |
|--|--|
| Reservoir Storage (1000 AF) - End of January | Watershed Snowpack Analysis - February 1, 2013 |
| Usable *** Usable Storage *** | Number This Year as % of |

| Reservoir | Capacity | This | Last | | Watershed | of | | |
|--------------|----------|-------|-------|-------|------------------------|------------|---------|--------|
| | 1 | Year | Year | Avg | | Data Sites | Last Yr | Median |
| | | | | | | | | |
| NOXON RAPIDS | 335.0 | 316.5 | 316.2 | 315.0 | LOWER CLARK FORK BASIN | 1 7 | 86 | 89 |

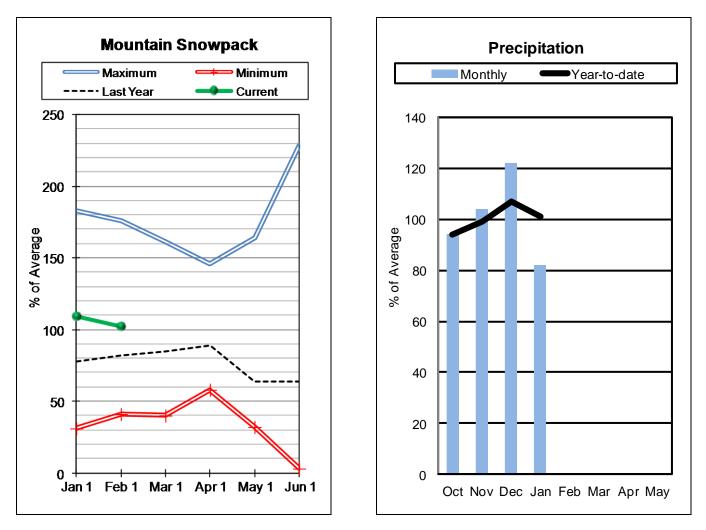
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

Jefferson River Basin



Snowpack conditions in the Jefferson River Basin were near normal on February 1. Snow water content was 102 percent of median and 111 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 82 percent of average and 77 percent of last year. Water year precipitation, beginning October 1, 2012, was 101 percent of average and 104 percent of last year.

Lima storage was 133 percent of average and 81 percent of last year; Clark Canyon storage was 96 percent of average and 72 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 92 percent.

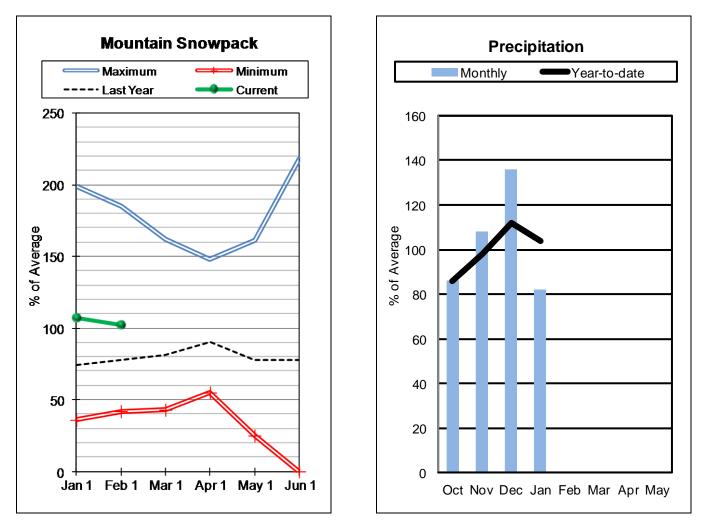
| JEFFERSON RIVER BASIN | | | | | | | | | | | |
|-----------------------------------|--------------|--------------|----------------|----------------------|--------------|--|------------|------------|--|--|--|
| | | | | - February 1, | | | | | | | |
| | | | | | | | | | | | |
| | | <<====== | Drier ==== | == Future Co | onditions == | ===== Wetter | =====>> | | | | |
| | | | | | | | | | | | |
| Forecast Point | Forecast | | | | | | | | | | |
| | Period | 90% | 70% | 1 | 50% | 30% | 10% | 30-Yr Avg. | | | |
| | | (1000AF) | (1000AF) | | (% AVG.) | (1000AF) | (1000AF) | (1000AF) | | | |
| | | | | 1 | | 1 | | | | | |
| Lima Reservoir Inflow (2) | APR-JUL | 51 | 71 75 | 84 91 | 102 | 97 107 | 117 129 | 82 | | | |
| | APR-SEP | 53 | /5 | 1 91 | 102 | 1 107 | 129 | 89 | | | |
| Clark Canyon Reservoir Inflow (2) | APR-JUL | 14.0 | 66 | 101 | 100 | 136 | 188 | 101 | | | |
| Clark Canyon Reservoir Inflow (2) | APR-SEP | 26 | 83 | 121 | 101 | 150 | 215 | 120 | | | |
| | AFR SEF | 20 | 05 | 1 121 | 101 | 1 100 | 215 | 120 | | | |
| Beaverhead R at Barretts (2) | APR-JUL | 12.0 | 85 | 135 | 105 | 185 | 260 | 129 | | | |
| (_) | APR-SEP | 17.0 | 103 | 161 | 103 | 220 | 305 | 156 | | | |
| | | | | | | | | | | | |
| Ruby R Reservoir Inflow (2) | APR-JUL | 42 | 57 | 68 | 88 | 79 | 94 | 77 | | | |
| - | APR-SEP | 50 | 68 | 80 | 88 | 92 | 110 | 91 | | | |
| | | | | İ | | İ | | | | | |
| Big Hole R at Wisdom | APR-JUL | 25 | 66 | 93 | 91 | 120 | 161 | 102 | | | |
| | APR-SEP | 25 | 68 | 98 | 91 | 128 | 171 | 108 | | | |
| | | | | | | | | | | | |
| Big Hole R nr Melrose | APR-JUL | 250 | 370 | 450 | 87 | 530 | 650 | 515 | | | |
| | APR-SEP | 270 | 400 | 490 | 88 | 580 | 710 | 560 | | | |
| | | | | | | | | | | | |
| Jefferson R nr Twin Bridges (2) | APR-JUL | 255 | 450 | 585 | 85 | 720 | 915 | 690 | | | |
| | APR-SEP | 250 | 475 | 625 | 86 | 775 | 1000 | 730 | | | |
| | | | | | | | | | | | |
| Boulder R nr Boulder | APR-JUL | 33 | 49 | 60 | 87 | 71 | 87 | 69 | | | |
| | APR-SEP | 35 | 52 | 64 | 87 | 76 | 93 | 74 | | | |
| Willow Ck Reservoir Inflow (2) | APR-JUL | 4.0 | 10.4 | 14.8 | 88 | 19.2 | 26 | 16.8 | | | |
| WILLOW CK RESERVOIR INLIGW (2) | | 4.0 5.2 | 12.2 | 14.0 | 88 | 22 | 20 | 19.3 | | | |
| | APR-SEP | 5.2 | 12.2 | 1 10.9 | 00 | 22 | 29 | 19.5 | | | |
| Jefferson R nr Three Forks (2) | APR-JUL | 275 | 500 | 650 | 88 | 800 | 1030 | 740 | | | |
| Serierson k m inde forks (2) | APR-SEP | 275 | 525 | 695 | 87 | 865 | 1120 | 800 | | | |
| | | 275 | 525 | 055 | 57 | 1 005 | 1120 | 000 | | | |
| | | | | ! =============== | | ==================================== | | | | | |
| JEFFERSON | N RIVER BASI | N | | 1 | JI | EFFERSON RIVEF | BASIN | | | | |
| Reservoir Storage (10) | i | Watershed Sr | nownack Analys | sis - Februa | rv 1. 2013 | | | | | | |

| Reservoir Storage (10) | 00 AF) - End | of Janua | ry | | Watershed Snowpac | ck Analysis - | February | 1, 2013 |
|------------------------|---------------------------|--|-------|-----------|----------------------------|----------------------|---------------------|---------|
| Reservoir | Usable Capacity | *** Usable Storage *** This Last Year Year Avg | | Watershed | Number of Data Sites | This Yea: Last Yr | r as % of Median | |
| LIMA | 84.0 38.9 48.2 29.3 | | | | BEAVERHEAD | 8 | 139 | 115 |
| CLARK CANYON | 255.6 | 116.6 | 162.7 | 121.7 | RUBY | 5 | 118 | 97 |
| RUBY RIVER | | NO REPO | RT | | BIGHOLE | 10 | 105 | 101 |
| | | | | | BOULDER | 7 | 92 | 96 |
| | | | | | JEFFERSON RIVER BASIN | 25 | 111 | 102 |

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Madison River Basin



Snowpack conditions in the Madison River Basin were near normal on February 1. Snow water content was 103 percent of median and 107 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 82 percent of average and 88 percent of last year. Water year precipitation, beginning October 1, 2012, was 104 percent of average and 111 percent of last year.

Ennis Lake storage at the end of January was 92 percent of average and 95 percent of last year and Hebgen Lake storage was 108 percent of average and 98 percent of last year.

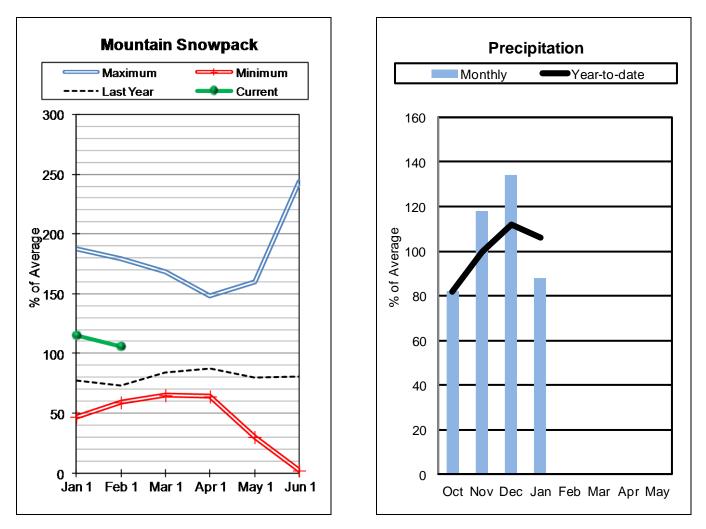
Assuming average precipitation, April through July streamflows are forecast to average 96 percent.

| MADISON RIVER BASIN | | | | | | | | | | |
|-----------------------------|-------------|-----------|--------------|---------------|--------------------|------------|---------|----------|--------------|--|
| | | Streamflo | w Forecasts | - Febr | oruary 1, 2013 | | | | | |
| | | | | | | | | | | |
| | | <<==== | = Drier ==== | == F1 | uture Conditions | | Wetter | ====>> | | |
| | | | | | | | | | | |
| Forecast Point | Forecast | | | - Char | nce Of Exceeding * | | | | | |
| rorecast rorne | Period | 90% | 70% | | 50% | | 10% | 10% | 30-Yr Avg. | |
| | PELIOU | | | 1 /1 | | 1 - | | 1 | | |
| | | (1000AF) | (1000AF) | | 1000AF) (% AVG.) | (10 | 00AF) | (1000AF) | (1000AF) | |
| | | | | . = = = = : | | = ======= | | | | |
| Hebgen Reservoir Inflow (2) | APR-JUL | 290 | 330 | | 360 97 | 1 | 390 | 430 | 370 | |
| | APR-SEP | 375 | 425 | | 460 98 | | 495 | 545 | 470 | |
| | | | | | | | | | | |
| Ennis Reservoir Inflow (2) | APR-JUL | 445 | 535 | | 595 95 | | 655 | 745 | 625 | |
| | APR-SEP | 560 | 665 | 1 | 735 95 | 1 | 805 | 910 | 775 | |
| | | | | i | | i | | | | |
| | | | | | | | | | | |
| MADISON | RIVER BASIN | | | 1 | | MADISON | RIVER P | BASTN | | |
| Reservoir Storage (10 | | | v | | Watershed | | | | rv 1. 2013 | |
| | | | | | | ========== | | | | |
| | Usable | *** IIsab | le Storage * | *** | | | Number | r This | Year as % of | |
| Reservoir | Capacity | This | Last | | Watershed | | of | | | |
| Reservoir | capacity | Year | | va | Watershed | | ata Sit | | | |
| | I | iear | ieal A | 1vg | | L | ata Sit | | ir Median | |
| | 41 0 | | | ==== = | | | | | | |
| ENNIS LAKE | 41.0 | 27.5 | 28.9 2 | 29.8 | MADISON abv HEB | GEN LAKE | 6 | 107 | 103 | |
| | | | | | | | _ | | | |
| HEBGEN LAKE | 377.5 | 302.2 | 309.0 27 | 79.0 | MADISON blw HEB | GEN LAKE | 8 | 129 | 101 | |
| | | | | | | | | | | |
| | | | | | MADISON RIVER B | ASIN | 14 | 118 | 102 | |
| | | | | Í | | | | | | |

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Gallatin River Basin



Snowpack conditions in the Gallatin River Basin were near normal on February 1. Snow water content was 106 percent of median and 133 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 88 percent of average and 131 percent of last year. Water year precipitation, beginning October 1, 2012, was 106 percent of average and 118 percent of last year.

Middle Creek storage was 98 percent of average and 102 percent of last year.

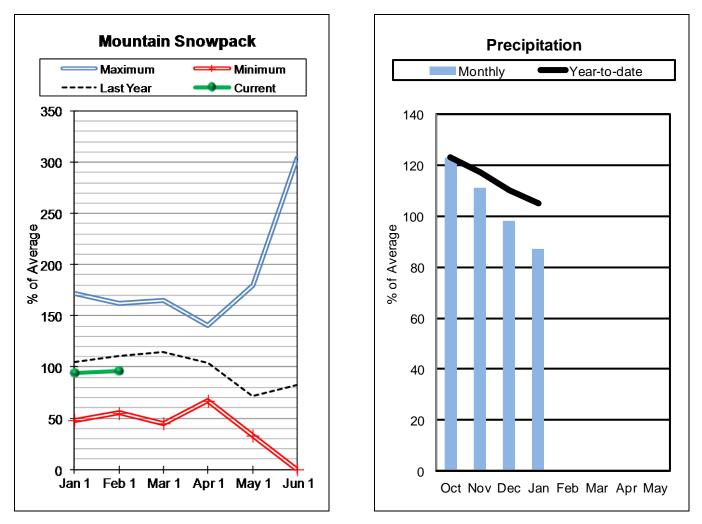
Assuming average precipitation, April through July streamflows are forecast to average 96 percent.

| GALLATIN RIVER BASIN | | | | | | | | | | |
|------------------------------|-----------------|-----------|--------------|--------|--|-----------|----------|----------|--------|----------|
| | | | | | bruary 1, 2013 | | | | | |
| | | SCIEdurio | w FOLECASUS | - rei | Druary 1, 2013 | | | | | |
| | | <<==== | = Drier ==== | === H | Future Conditions | s ====== | = Wetter | =====>> | | |
| | | | | | | | | | i i | |
| Forecast Point | Forecast | | | == Cha | ance Of Exceeding | g * ===== | | | i | |
| | Period | 90% | 70% | | 50% | | 30% | 10% | 30. | -Yr Avg. |
| | | (1000AF) | (1000AF) | 1 | (1000AF) (% AVG | .) | (1000AF) | (1000AF) | 1 | (1000AF) |
| | = = = = = | | ==== ===== | | | | | | | |
| Gallatin R nr Gateway | APR-JUL | 295 | 350 | | 390 98 | | 430 | 485 | | 400 |
| | APR-SEP | 345 | 410 | 1 | 455 97 | | 500 | 565 | | 470 |
| | | | | 1 | | | | | | |
| Hyalite Reservoir Inflow (2) | APR-JUL | 15.2 | 17.5 | | 19.0 95 | | 21 | 23 | | 20 |
| | APR-SEP | 18.1 | 20 | | 22 96 | | 24 | 26 | | 23 |
| Gallatin R at Logan | APR-JUL | 250 | 350 | | 420 96 | | 490 | 590 | | 440 |
| | APR-SEP | 295 | 410 | i i | 485 96 | l l | 560 | 675 | | 505 |
| | | | | i i | | | | | | |
| | | | | | | | | | | |
| GALLA | TIN RIVER BASIN | | | | | GALLAT | IN RIVER | BASIN | | |
| Reservoir Storage | (1000 AF) - End | of Januar | У | | Watershed Snowpack Analysis - February 1, 2013 | | | | | |
| | | | | | | | | | | |
| | Usable | | le Storage * | * * * | | | Numbe | r This | 9 Year | as % of |
| Reservoir | Capacity | This | Last | | Watershed | | of | | | |
| | | Year | | Avg | | | Data Si | | | Median |
| | | | | | | | | | | |
| MIDDLE CREEK | 10.2 | 5.2 | 5.1 | 5.3 | UPPER GALLAT | IN | 4 | 144 | | 114 |
| | | | | | HYALITE | | 3 | 89 | | 93 |
| | | | | | DIADILE | | 5 | 09 | | 93 |
| | | | | | BRIDGER | | 2 | 168 | | 100 |
| | | | | | GALLATIN RIV | ER BASIN | 9 | 133 | | 105 |
| | | | | | 1 | | | | | |

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Missouri Mainstem River Basin



Snowpack conditions in the Headwaters Missouri Mainstem River Basin were near normal on February 1. Snow water content was 96 percent of median and 78 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 87 percent of average and 63 percent of last year. Water year precipitation, beginning October 1, 2012, was 105 percent of average and 88 percent of last year.

Canyon Ferry Lake storage was 101 percent of average and 97 percent of last year; Helena Valley storage was 121 percent of average and 95 percent of last year; Lake Helena storage was 91 percent of average and 101 percent of last year; Hauser & Helena storage was 95 percent of average and 100 percent of last year; Holter Lake storage was 101 percent of average and 100 percent of last year; Holter Lake storage was 101 percent of average and 100 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 94 percent.

_____ MISSOURI MAINSTEM RIVER BASIN

Streamflow Forecasts - February 1, 2013

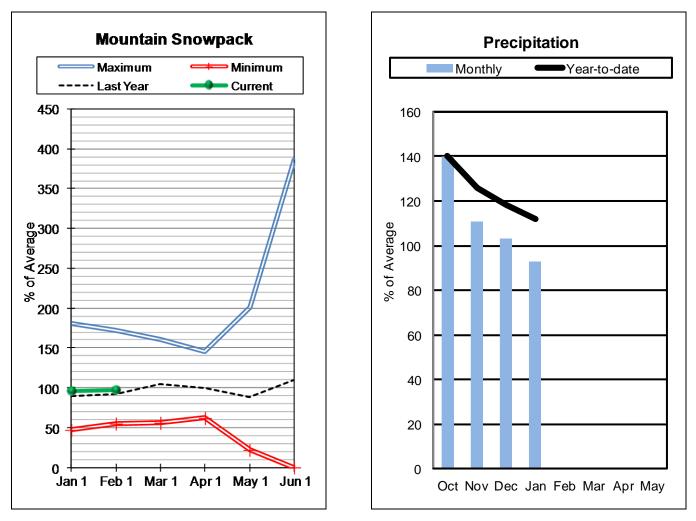
| | | Streamilow | / Forecasts - | - February 1, | 2013 | | | | | | |
|-------------------------------|----------|--------------|---------------|---|--------------|---|----------|------------|--|--|--|
| <pre><</pre> | | | | | | | | | | | |
| | | <<====== | Drier ==== | == Future Co | onditions == | ===== Wetter | =====>> | | | | |
| | | | | | | | | | | | |
| Forecast Point | Forecast | ======== | | = Chance Of E | xceeding * = | | | | | | |
| | Period | 90% | 70% | 5 | 50% | 30% | 10% | 30-Yr Avg. | | | |
| | | (1000AF) | (1000AF) | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF) | | | |
| | | ============ | | ======================================= | ============ | ======================================= | | | | | |
| Missouri R at Toston (2) | APR-JUL | 1050 | 1430 | 1690 | 94 | 1950 | 2330 | 1790 | | | |
| MIBBOULL R de TOBEON (2) | APR-SEP | 1180 | 1630 | 1940 | 94 | 2250 | 2700 | 2070 | | | |
| | APR-SEP | 1100 | 1030 | 1 1940 | 24 | 2250 | 2700 | 2070 | | | |
| Desuberry David Gueder | ADD THE | 20 | ~ ~ | 0.4 | 94 | 100 | 129 | 0.0 | | | |
| Dearborn R nr Craig | APR-JUL | 39 | 66 | 84 | | 102 | | 89 | | | |
| | APR-SEP | 43 | 72 | 91 | 96 | 110 | 139 | 95 | | | |
| | | | | | | | | | | | |
| Missouri R at Fort Benton (2) | APR-JUL | 1530 | 2080 | 2450 | 94 | 2820 | 3370 | 2610 | | | |
| | APR-SEP | 1790 | 2450 | 2900 | 93 | 3350 | 4010 | 3110 | | | |
| | | | | | | | | | | | |
| Missouri R nr Virgelle (2) | APR-JUL | 1780 | 2390 | 2810 | 94 | 3230 | 3840 | 3000 | | | |
| 5 · · · | APR-SEP | 2010 | 2750 | 3260 | 93 | 3770 | 4510 | 3520 | | | |
| | | | | | | | | | | | |
| Missouri R nr Landusky (2) | APR-JUL | 1900 | 2540 | 2980 | 94 | 3420 | 4060 | 3160 | | | |
| MISSOULI K III Dandusky (2) | APR-SEP | 2160 | 2940 | 3470 | 93 | 4000 | 4780 | 3720 | | | |
| | APR-SEP | 2100 | 2940 | 1 3470 | 55 | 4000 | 4700 | 5720 | | | |
| | | | | | | | | | | | |
| Missouri R bl Ft Peck Dam (2) | APR-JUL | 1870 | 2570 | 3050 | 94 | 3530 | 4230 | 3240 | | | |
| | APR-SEP | 1900 | 2800 | 3410 | 92 | 4020 | 4920 | 3700 | | | |
| | | | | | | | | | | | |
| Lake Sakakawea Inflow (2) | APR-JUL | 4910 | 6510 | 7600 | 92 | 8690 | 10300 | 8310 | | | |
| | APR-SEP | 5190 | 7170 | 8520 | 91 | 9870 | 11800 | 9400 | | | |
| | | | | ĺ | | | | | | | |
| | | | | · | ' | | | | | | |

| | | ========= | | | | | | | | |
|-----------------------|--------------|---------------------------------|---------|---------|--|------------|------------------|--------|--|--|
| MISSOURI MAI | INSTEM RIVER | BASIN | | | MISSOURI MAINSTEM RIVER BASIN | | | | | |
| Reservoir Storage (10 | 000 AF) - En | d of Janu | ary | | Watershed Snowpack Analysis - February 1, 2013 | | | | | |
| | | | | | | | | | | |
| | | Usable *** Usable Storage *** | | | | Number | This Year as % o | | | |
| Reservoir | Capacity | | Last | | Watershed | of | | | | |
| | | Year | Year | Avg |] | Data Sites | Last Yr | Median | | |
| | | | | | | | | | | |
| CANYON FERRY LAKE | 2043.0 | 1542.7 | 1590.0 | 1531.0 | HEADWATERS MAINSTEM | 7 | 78 | 96 | | |
| | | | | | | | | | | |
| HELENA VALLEY | 9.2 | 5.7 | 6.0 | 4.7 | SMITH-JUDITH-MUSSELSHEL | L 9 | 101 | 97 | | |
| LAKE HELENA | 12.7 | 9.9 | 9.8 | 10.9 | SUN-TETON-MARIAS | 7 | 70 | 77 | | |
| LAKE HELENA | 12.7 | 9.9 | 9.0 | 10.9 | SUN-IEION-MARIAS | / | 70 | // | | |
| HAUSER & HELENA | 74.6 | 70.0 | 69.8 | 73.5 | MAINSTEM ab FT PECK RES | 22 | 83 | 88 | | |
| Intoble a fibbling | /1.0 | /0.0 | 09.0 | /5.5 | | 22 | 05 | 00 | | |
| HOLTER LAKE | 81.9 | 81.2 | 81.0 | 80.7 | MILK RIVER BASIN | 1 | 200 | 106 | | |
| | | | | | | | | | | |
| FORT PECK LAKE | 18910.0 | 13011.0 | 15160.0 | 12953.0 | MISSOURI MAINSTEM BASIN | 22 | 85 | 94 | | |
| | | | | | | | | | | |

i * 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Smith-Judith-Musselshell River Basins



Snowpack conditions in the Smith-Judith-Musselshell River Basins were near normal February 1. Snow water content was 97 percent of median and 94 percent of last year. Snow water content in the Smith River Basin was 102 percent of median and 96 percent of last year; the Judith River Basin was 97 percent of median and 92 percent of last year; and the Musselshell Basin River was 80 percent of median and 87 percent of last year.

Mountain precipitation according to SNOTEL stations during January in all three basins was 93 percent of average and 86 percent of last year. Water year precipitation for the greater basin, beginning October 1, 2012, was 112 percent of average and 103 percent of last year.

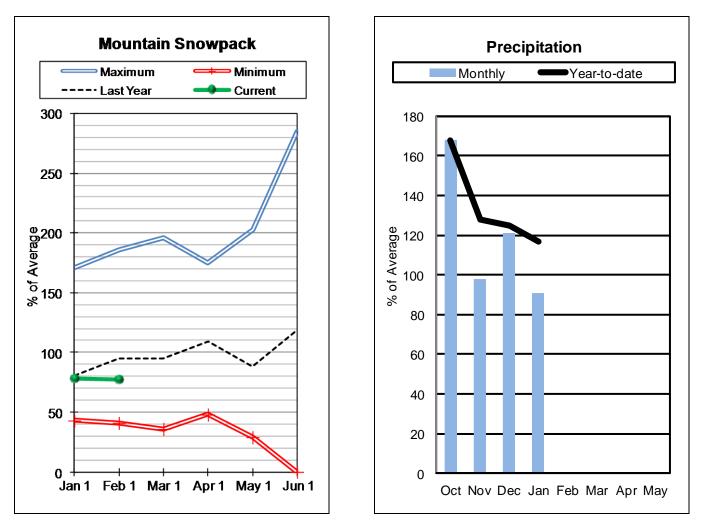
Ackley storage was 112 percent of average and 74 percent of last year; Bair storage was 148 percent of average and 77 percent of last year; Martinsdale storage was 88 percent of average and 78 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 91 percent.

| SMITH-JUDITH-MUSSELSHELL RIVER BASINS | | | | | | | | | | | | | |
|---|--------------------|--|------------|---------|------------------|--------------------|------------|----------------|------------|--------------|--|--|--|
| Streamflow Forecasts - February 1, 2013 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | <<===== Drier ===== Future Conditions ====== Wetter ====>> | | | | | | | | | | | |
| Forecast Point | Forecast | ======= | | === Cha | ance Of E | xceeding * = | | | ==== | | | | |
| | Period | 90% | 70% | | 5 | 08 | 30% | 1 | 0% | 30-Yr Avg. | | | |
| | | 1 1 1 1 1 1 | (1000AF) | | | (% AVG.) | | F) (10 | | (1000AF) | | | |
| Sheep Ck nr White Sulphur Springs | APR-JUL | 10.4 | 13.6 | == ===: | ======== 15.8 | 102 | 18.0 | | 21 | 15.5 | | | |
| Sneep CK nr white Sulphur Springs | APR-JUL APR-SEP | 10.4 | 16.2 | | 18.7 | 102 | 18.0 | | 21 25 | 18.4 | | | |
| | AFR SEF | 12.5 | 10.2 | | 10.7 | 102 | 21 | | 20 | 10.1 | | | |
| Smith R bl Eagle Ck (2) | APR-JUL | 57 | 89 | i | 110 | 104 | 131 | | 163 | 106 | | | |
| - | APR-SEP | 61 | 97 | i | 122 | 105 | 147 | | 183 | 116 | | | |
| | | | | | | | | | | | | | |
| NF Musselshell R nr Delpine | APR-JUL | 2.1 | 3.4 | | 4.2 | 98 | 5.0 | | 6.3 | 4.3 | | | |
| | APR-SEP | 2.6 | 4.0 | | 5.0 | 100 | 6.0 | | 7.4 | 5.0 | | | |
| SF Musselshell R ab Martinsdale | APR-JUL | 5.0 | 14.0 | | 27 | 77 | 40 | | 59 | 35 | | | |
| bi Mubbeibheil k ub Muleinbuule | APR-SEP | 5.0 | 15.2 | | 29 | 76 | 43 | | 63 | 38 | | | |
| | | | | i | | | | | | | | | |
| Musselshell R at Harlowton (2) | APR-JUL | 0.0 | 28 | i | 50 | 88 | 72 | | 105 | 57 | | | |
| | APR-SEP | 0.0 | 28 | 1 | 52 | 88 | 76 | | 110 | 59 | | | |
| | | | <i>c</i> | | 5.0 | 50 | 98 | | 165 | 68 | | | |
| Musselshell R nr Roundup (2) | APR-JUL APR-SEP | -20.0 -20.0 | 6.3 6.6 | | 52 52 | 78 | 98 | | 165 164 | 67 66 | | | |
| | AFK-SEP | -20.0 | 0.0 | | 52 | 19 | 57 | | 104 | 00 | | | |
| | | | | | | ا ============= | | | | | | | |
| SMITH-JUDITH-MUSS | SELSHELL RIV | ER BASINS | | | | SMITH-JUDI | TH-MUSSELS | HELL RI | VER BAS | INS | | | |
| Reservoir Storage (100 | | | | | | Watershed Sn | | | | | | | |
| | Usable | | le Storage | | ========== | | | ====== mber | | Year as % of | | | |
| Reservoir | Capacity | This | Last | | Water | ched | | of | | 1ear as % or | | | |
| Rebervoir | capacity | Year | Year | Avq | Matter | blica | | Sites | Last | | | | |
| | | | | | ======== | | | | | | | | |
| SMITH RIVER | | NO REPOR | Г | | SMITH | [| | 6 | 107 | 102 | | | |
| | | | | | | | | | | | | | |
| ACKLEY LAKE | 7.0 | 2.9 | 3.9 | 2.6 | HIGHW | IOOD | | 0 | 80 | 0 | | | |
| BAIR | 7.0 | 4.3 | 5.6 | 2.9 | JUDIT | Ч | | 4 | 92 | 97 | | | |
| | | | | | ĺ | | | | | | | | |
| MARTINSDALE | 23.1 | 6.8 | 8.7 | 7.7 | MUSSE | LSHELL | | 2 | 130 | 80 | | | |
| DEADMAN'S BASIN | | NO REPOR | г | | אדייי | -JUDITH-MUSS | FI.SHFI.I. | 9 | 101 | 97 | | | |
| DEFERENCE DROIN | | NO KEPOK | - | | 00110 | . 00D111-H035 | | 2 | TOT | | | | |
| | | | | | ' | | | | | | | | |

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.



Snowpack conditions in the Sun-Teton-Marias River Basins were below normal on February 1. Snow water content was 77 percent of median and 70 percent of last year. Snow water content in the Sun River Basin was 89 percent of median and 68 percent of last year; the Teton River Basin was 80 percent of median and 60 percent of last year; and the Marias River Basin was 72 percent of median and 74 percent of last year.

Mountain precipitation according to SNOTEL stations during January in all three basins was 91 percent of average and 62 percent of last year. Mountain water year precipitation for the greater basin according to SNOTEL stations, beginning October 1, 2012, was 117 percent of average and 103 percent of last year.

Gibson storage was 39 percent of average and 82 percent of last year; Pishkun storage was 10 percent of average and 9 percent of last year; Willow Creek storage was 120 percent of average and 96 percent of last year; Swift storage was 91 percent of average and 108 percent of last year; Lake Frances storage was 70 percent of average and 49 percent of last year; and Lake Elwell (Tiber) storage was 109 percent of average and 103 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 95 percent.

| CINI DEDONI MARIAC RIVER RACING | |
|---------------------------------|--|

SUN-TETON-MARIAS RIVER BASINS Streamflow Forecasts - February 1, 2013

| Streamflow Forecasts - February 1, 2013 | | | | | | | | | | | | | |
|---|------------|----------|------------|--|-------------|---|----------|------------|--|--|--|--|--|
| <====== Future Conditions ====== Wetter ====>>> | | | | | | | | | | | | | |
| | | <<====== | Drier ==== | == Future Co | nditions == | ===== Wetter | =====>> | | | | | | |
| | | | | | | | | | | | | | |
| Forecast Point | Forecast | | | | | | | | | | | | |
| | Period | 90% | 70% | - | 0% | 30% | 10% | 30-Yr Avg. | | | | | |
| | | (1000AF) | (1000AF) | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF) | | | | | |
| | | | | ====================================== | =========== | ======================================= | | | | | | | |
| Gibson Reservoir Inflow (2) | APR-JUL | 285 | 340 | 380 | 96 | 420 | 475 | 395 | | | | | |
| | APR-SEP | 320 | 380 | 420 | 96 | 460 | 520 | 440 | | | | | |
| | | | | ĺ | | | | | | | | | |
| Two Medicine R nr Browning (2) | APR-JUL | 130 | 155 | 172 | 94 | 189 | 215 | 183 | | | | | |
| 5 | APR-SEP | 140 | 166 | 183 | 94 | 200 | 225 | 194 | | | | | |
| | | | | | | | | | | | | | |
| Badger Ck nr Browning | APR-JUL | 54 | 71 | 82 | 93 | 93 | 110 | 88 | | | | | |
| | APR-SEP | 64 | 82 | 94 | 91 | 106 | 124 | 103 | | | | | |
| | 11111 0001 | 01 | 02 | | | 200 | | 200 | | | | | |
| Swift Reservoir Inflow (2) | APR-JUL | 34 | 45 | 53 | 93 | 61 | 72 | 57 | | | | | |
| Swill Reservoir inflow (2) | APR-SEP | 42 | 54 | 63 | 94 | 72 | 84 | 67 | | | | | |
| | AFR OBF | 12 | 54 | 05 | 71 | /2 | 04 | 07 | | | | | |
| Dupuyer Ck nr Valier | APR-JUL | 1.6 | 5.5 | 10.3 | 93 | 15.1 | 22 | 11.1 | | | | | |
| Dupuyer CK III Valler | APR-SEP | 1.8 | 6.2 | 11.5 | 91 | 16.8 | 25 | 12.7 | | | | | |
| | APR-SEP | 1.0 | 0.2 | 1 11.5 | 91 | 10.0 | 25 | 12.7 | | | | | |
| | | 4.2 | | | 97 | | 0.1 | 60 | | | | | |
| Cut Bank Ck nr Browning | APR-JUL | 43 47 | 57 62 | 67 72 | 97 | 77 | 91 97 | 69 75 | | | | | |
| | APR-SEP | 4 / | 62 | /2 | 96 | 82 | 97 | 75 | | | | | |
| | | | | | | | | | | | | | |
| Marias R nr Shelby (2) | APR-JUL | 161 | 270 | 340 | 99 | 410 | 520 | 345 | | | | | |
| | APR-SEP | 156 | 270 | 345 | 96 | 420 | 535 | 360 | | | | | |
| | | | | | | | | | | | | | |
| Teton R nr Dutton | APR-JUL | 5.0 | 19.5 | 38 | 91 | 56 | 84 | 42 | | | | | |
| | APR-SEP | 5.0 | 24 | 44 | 92 | 64 | 93 | 48 | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

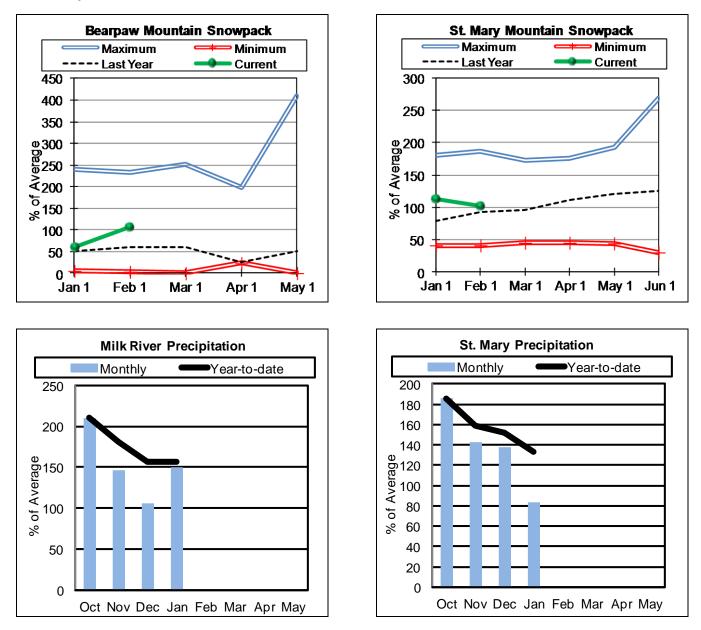
SUN-TETON-MARIAS RIVER BASINS Reservoir Storage (1000 AF) - End of January SUN-TETON-MARIAS RIVER BASINS Watershed Snowpack Analysis - February 1, 2013

| Reservoir Scorage (100 | water siled Silowpe | ICK MILATASIS | rebruary | , 2015 | | | | |
|-------------------------|---------------------------|--------------------------|---------------------------|---------------|------------------|----------------------------|----------------------|-------------------|
| Reservoir | Usable Capacity | *** Usal This Year | ble Stora Last Year | ge *** Avg | Watershed | Number of Data Sites | This Year Last Yr | as % of Median |
| GIBSON | 99.1 | 15.6 | 19.1 | 39.9 | SUN | 2 | 68 | 89 |
| PISHKUN | 32.0 | 1.8 | 19.8 | 17.5 | TETON | 3 | 60 | 80 |
| WILLOW CREEK | 32.2 | 27.5 | 28.6 | 22.9 | MARIAS | 4 | 74 | 72 |
| LOWER TWO MEDICINE LAKE | | NO REPO | RT | | SUN-TETON-MARIAS | 7 | 70 | 77 |
| FOUR HORNS LAKE | | NO REPO | RT | | | | | |
| SWIFT | 30.0 | 13.9 | 12.9 | 15.3 | | | | |
| LAKE FRANCES | 112.0 | 40.4 | 81.9 | 57.5 | | | | |
| LAKE ELWELL (TIBER) | 1347.0 | 760.9 | 738.2 | 700.8 | | | | |
| | | | | | | | | |

------* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

St. Mary and Milk River Basins



Snowpack in the Saint Mary River Basin was near normal on February 1. Snow water content was 102 percent of median and 97 percent of last year. Snowpack in the Milk River Basin was near average at 106 percent of median and 200 percent of last year. The combined basins had a snowpack at 103 percent of median and 101 percent of last year.

Mountain precipitation, according to SNOTEL stations, in the St. Mary River Basin during January was 83 percent of average and 67 percent of last year; and in the Milk River Basin during January was 150 percent of average and 200 percent of last year. Water year precipitation for both basins, beginning October 1, 2012, was 135 percent of average and 132 percent of last year.

Lake Sherburne storage was 187 percent of average and 212 percent of last year; Fresno storage was 115 percent of average and 80 percent of last year; and Nelson storage was 138 percent of average and 85 percent of last year.

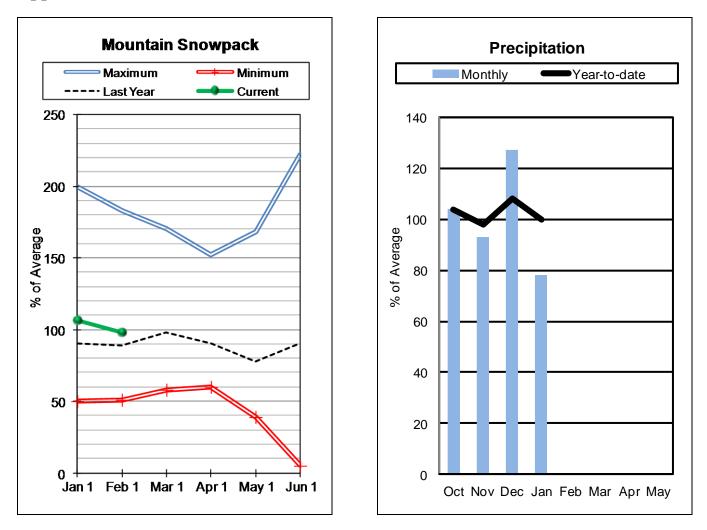
Assuming average precipitation, April through July streamflows in the St. Mary are forecast to average 101 percent. Assuming average precipitation, April through July streamflows in the Milk are forecast to average 105 percent.

| | | | RY and MILK | | | | | | | | | |
|---|----------|--|--|-------------|--|---------------|--------|-------------|----------|-----------|-----|--|
| Streamflow Forecasts - February 1, 2013 | | | | | | | | | | | | |
| | | | | | | | | | | | === | |
| | | <<====== | <<===== Drier ===== Future Conditions ====== Wetter ====>> | | | | | | | | | |
| Forecast Point | Forecast | ====================================== | | | | | | | | | | |
| | Period | 90% | 70% | | | 0% | | 30% | 10% | 30-Yr Av | g. | |
| | | | (1000AF) | | | (% AVG.) | | | (1000AF) | (1000A | | |
| | | | | = = = = : | | | | | | | | |
| Lake Sherburne Inflow | APR-JUL | 82 99 | 91 | | 97 | 100 | | 103 | 112 | - | 7 | |
| | APR-SEP | 99 | 108 | | 114 | 102 | | 120 | 129 | 11 | 2 | |
| St. Mary R nr Babb (2) | APR-JUL | 305 | 345 | i | 375 | 101 | | 405 | 445 | 37 | 0 | |
| - | APR-SEP | 365 | 405 | i | 435 | 102 | | 465 | 505 | 42 | 5 | |
| | | | | | | | | | | | _ | |
| St. Mary R at Int'l Boundary (2) | APR-JUL | 340 | 400 | | 440 | 101 | | 480 | 540 | 43 | | |
| | APR-SEP | 400 | 460 | | 500 | 99 | | 540 | 600 | 50 | 5 | |
| Milk R at Western Crossing | MAR-JUL | 9.3 | 24 | ł | 34 | 92 | | 44 | 59 | 3 | 7 | |
| ······ | MAR-SEP | 9.1 | 25 | 1 | 36 | 92 | | 47 | 63 | | 9 | |
| | APR-JUL | 6.1 | 19.2 | 1 | 28 | 90 | | 37 | 50 | 3 | 1 | |
| | APR-SEP | 5.9 | 20 | 1 | 30 | 91 | | 40 | 54 | | 3 | |
| | THE OLD | 5.5 | 20 | 1 | 50 | 21 | | 10 | 51 | - | | |
| Milk R at Eastern Crossing | MAR-JUL | 1.0 | 39 | i | 66 | 118 | | 93 | 132 | 5 | 6 | |
| | MAR-SEP | 2.9 | 46 | i | 75 | 119 | | 104 | 147 | 6 | 3 | |
| | APR-JUL | 1.5 | 30 | i | 52 | 116 | | 74 | 106 | 4 | 5 | |
| | APR-SEP | 2.6 | 39 | i – | 64 | 116 | | 89 | 125 | 5 | 5 | |
| | | | | | | | | | | | | |
| ST. MARY and I | | | | | | | | | | | === | |
| Reservoir Storage (100 | | | , | | ST. MARY and MILK RIVER BASINS Watershed Snowpack Analysis - February 1, 2013 | | | | | | | |
| | | | | | | | | | | | | |
| | Usable | | le Storage | * * * | | | | Numbe | | Year as % | | |
| Reservoir | Capacity | This | Last | | Water | shed | | of | ===== | | == | |
| | | Year | | Avg | | | | Data Si | | | | |
| LAKE SHERBURNE | 64.3 | 53.3 | | 28.5 | ======= ST. M | | | ====== 2 | 97 | 102 | === | |
| LARE SHERBURNE | 04.5 | 55.5 | 23.1 | 20.5 | 51. M | IARI | | 2 | 51 | 102 | | |
| FRESNO | 127.0 | 47.8 | 59.7 | 41.7 | BEARP | AW MOUNTAINS | | 1 | 200 | 106 | | |
| | | | | | İ | | | | | | | |
| BEAVER CREEK | | NO REPORT | C | | CYPRE | SS HILLS, CAN | NADA | 0 | 0 | 0 | | |
| NELSON | 66.8 | 43.5 | 51.0 | 31.5 | MTLK | RIVER BASIN | | 1 | 200 | 106 | | |
| | 00.0 | | 51.0 | 51.5 | 1 1111 | NTYDE DADIN | | T | 200 | 100 | | |
| | | | | | ST. M | ARY & MILK BA | ASINS | 3 | 101 | 103 | | |
| | | | | | İ | | | | | | | |
| | | | | ===== | | | ====== | | | | === | |

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Upper Yellowstone River Basin



Snowpack conditions in the Upper Yellowstone River Basin were near normal on February 1. Snow water content was 98 percent of median and 95 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 78 percent of average and 81 percent of last year. Water year precipitation, beginning October 1, 2012, was 100 percent of average and 98 percent of last year.

Mystic Lake storage was 115 percent of average and 75 percent of last year and Cooney storage was not available at the time of this report.

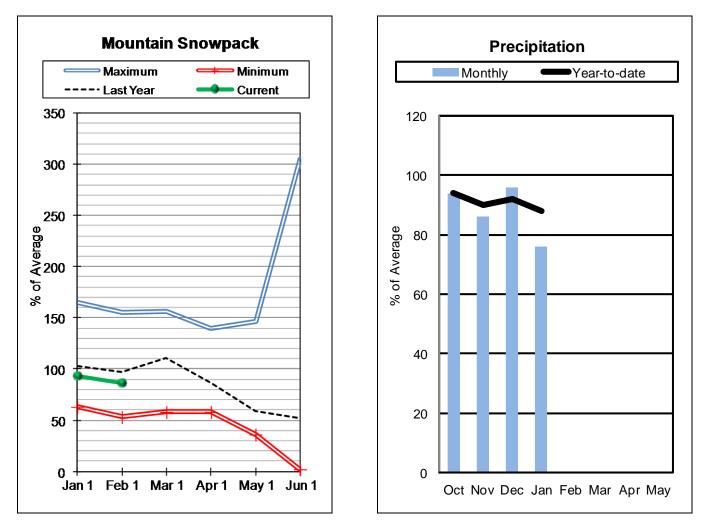
Assuming average precipitation, April through July streamflows are forecast to average 91 percent.

| | | | ZELLOWSTON | | | 0010 | | | | | | |
|---|--------------------|-------------------|--------------------|----------|--------------|-------------|----------|--------------|------------|---------|--------------|--|
| Streamflow Forecasts - February 1, 2013 | | | | | | | | | | | | |
| | | | | | | onditions | | | | | | |
| Forecast Point | Forecast | ======= | | === Ch | nance Of E | Exceeding * | | | | | | |
| | Period | 90% | 70% | | | 50% | | | 10% | 30-Yr | Avg. | |
| | | | (1000AF) | 1 | | (% AVG.) | | 000AF) (1 | | | 00AF) | |
| ····· | | | | == === | | | = ====== | | | | | |
| Yellowstone R at Yellowstone Lake | APR-JUL APR-SEP | 450 600 | 515 680 | ļ | 555 735 | 97 96 | | 595 790 | 660 870 | | 575 770 | |
| Yellowstone R at Corwin Springs | APR-JUL | 1280 | 1430 | ł | 1540 | 97 | | 1650 | 1800 | | 1590 | |
| | APR-SEP | 1500 | 1680 | | 1810 | 96 | 1 | 1940 | 2120 | | 1880 | |
| | | 1440 | 1 6 2 0 | | 1860 | | | 1000 | | | 1000 | |
| Yellowstone R at Livingston | APR-JUL | 1440 1690 | 1630 1920 | | 1760 2070 | 98 97 | 1 | 1890 2220 | 2080 | | 1800 2140 | |
| | APR-SEP | 1690 | 1920 | | 2070 | 97 | | 2220 | 2450 | | 2140 | |
| Shields R nr Livingston | APR-JUL | 19.0 | 65 | i i | 97 | 75 | i i | 129 | 175 | | 129 | |
| | APR-SEP | 21 | 71 | | 106 | 74 | | 141 | 191 | | 143 | |
| Boulder R at Big Timber | APR-JUL | 200 | 240 | | 270 | 96 | | 300 | 340 | | 280 | |
| Boulder K at Big Himber | APR-SEP | 200 | 240 | | 290 | 97 | | 320 | 340 | | 300 | |
| | | | | i | | | i | | | | | |
| West Rosebud Ck nr Roscoe (2) | APR-JUL | 45 | 50 | | 53 | 90 | | 56 | 61 | | 59 | |
| | APR-SEP | 57 | 64 | | 68 | 92 | | 72 | 79 | | 74 | |
| Stillwater R nr Absarokee (2) | APR-JUL | 310 | 370 | | 410 | 92 | | 450 | 510 | | 445 | |
| | APR-SEP | 365 | 435 | i | 480 | 92 | i i | 525 | 595 | | 520 | |
| | | | | | | | | = | | | = 1 0 | |
| Clarks Fk Yellowstone R nr Belfry | APR-JUL APR-SEP | 395 430 | 450 485 | | 485 525 | 95 96 | | 520 565 | 575 620 | | 510 550 | |
| | APR-SEP | 430 | 405 | | 525 | 96 | | 505 | 020 | | 550 | |
| Yellowstone R at Billings | APR-JUL | 2280 | 2750 | i | 3060 | 95 | i | 3370 | 3840 | | 3230 | |
| | APR-SEP | 2600 | 3150 | l l | 3520 | 94 | 1 | 3890 | 4440 | | 3730 | |
| | | | | | | | | | | | | |
| UPPER YELLOWS | | | | | | | | STONE RIVE | | | | |
| Reservoir Storage (100 | | | 7 | | i | Watershed | | | | ry 1, 2 | 013 | |
| | | | | | | | | | | | | |
| Reservoir | Usable Capacity | *** Usabl This | le Storage Last | * * * | Water | cahod | | Number of | | Year as | | |
| RESELVOIT | Capacity | Year | Year | Avq | water | sileu | | Data Sites | | | edian | |
| | | | | | : ======= | | | | | | | |
| MYSTIC LAKE | 21.0 | 6.1 | 8.1 | 5.3 | YELLC | WSTONE ab | LIVINGST | ON 14 | 95 | 10 | 1 | |
| COONEY | | NO REPORT | ſ | | SHIEL | DS | | 4 | 132 | 8 | 8 | |
| | | | | | BOULD | DER-STILLWA | FER | 3 | 107 | 10 | б | |
| | | | | | REDI | LODGE-ROCK | CREEK | 2 | 53 | 7 | 4 | |
| | | | | | CLARK | 'S FORK | | 7 | 90 | 10 | 0 | |
| | | | | | UPPER | YELLOWSTO | NE BASIN | 26 | 94 | 9 | 8 | |
| | | | | | | | | | | | | |

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Lower Yellowstone River Basin



Snowpack conditions in the Lower Yellowstone River Basin were below normal on February 1. Snow water content was 86 percent of median and 76 percent of last year.

Mountain precipitation according to SNOTEL stations during January was 76 percent of average and 81 percent of last year. Water year precipitation, beginning October 1, 2012, was 88 percent of average and 77 percent of last year.

Bighorn Lake storage was 106 percent of average and 98 percent of last year and Tongue River storage was 175 percent of average and 86 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to average 79 percent.

| LOUDD VELLOUGENE DIVED DIGIN |
|------------------------------|

LOWER YELLOWSTONE RIVER BASIN Streamflow Forecasts - February 1, 2013

| | | | / Forecasts - | | | | | |
|-----------------------------------|----------|-------------|---------------|---------------|---------------|----------------|------------|--------------|
| | | | | | | ======= Wetter | | |
| | | <<====== | Drier ==== | == Future C | onditions == | ===== wetter | =====>> | |
| Forecast Point | Forecast | | | - Chance Of i | Exceeding * : | | | |
| Forecast Forme | Period | 90% | 70% | | 50% | 30% | 10% | 30-Yr Avg. |
| | 101104 | (1000AF) | (1000AF) | | (% AVG.) | (1000AF) | (1000AF) | (1000AF) |
| | | 1 4 4 4 4 4 | , | | | | , , | |
| Bighorn R nr St. Xavier (2) | APR-JUL | 565 | 930 | 1180 | 86 | 1430 | 1790 | 1380 |
| | APR-SEP | 570 | 975 | 1250 | 86 | 1520 | 1930 | 1460 |
| | | | | | | | | |
| Little Bighorn R nr Hardin | APR-JUL | 17.1 | 46 | 65 | 66 | 84 | 113 | 98 |
| | APR-SEP | 20 | 52 | 73 | 66 | 94 | 126 | 111 |
| | | | | | | | | |
| Tongue R nr Dayton (2) | APR-JUL | 34 | 52 | 65 | 76 | 78 | 96 | 86 |
| | APR-SEP | 41 | 61 | 74 | 76 | 87 | 107 | 98 |
| Big Goose Ck nr Sheridan | APR-JUL | 12.8 | 24 | 32 | 70 | 40 | 51 | 46 |
| BIG GODSE CK III SHELIDAH | APR-SEP | 19.4 | 31 | 32 | 70 | 40 | 59 | 54 |
| | MIN ODI | 19.1 | 51 | 55 | 72 | 1 | 55 | 51 |
| Little Goose Ck nr Bighorn | APR-JUL | 10.6 | 18.0 | 23 | 74 | 28 | 35 | 31 |
| | APR-SEP | 16.6 | 25 | 30 | 77 | 35 | 43 | 39 |
| | | | | ĺ | | | | |
| Tongue River Reservoir Inflow (2) | APR-JUL | 18.0 | 82 | 125 | 65 | 168 | 230 | 193 |
| | APR-SEP | 29 | 96 | 141 | 66 | 186 | 255 | 215 |
| | | | | | | | | |
| Yellowstone R at Miles City (2) | APR-JUL | 2870 | 3720 | 4290 | 90 | 4860 | 5710 | 4780 |
| | APR-SEP | 3220 | 4220 | 4890 | 90 | 5560 | 6560 | 5450 |
| Develop D at Manubard | 100 1111 | 5.0 | 111 | 1.50 | 0.6 | 102 | 25.0 | 1 7 7 |
| Powder R at Moorhead | APR-JUL | 52 71 | 111 132 | 152 174 | 86 89 | 193 215 | 250 275 | 177 196 |
| | APR-SEP | /1 | 132 | 1/4 | 69 | 212 | 275 | 190 |
| Powder R nr Locate | APR-JUL | 47 | 121 | 171 | 86 | 220 | 295 | 199 |
| rowaci k ni bocace | APR-SEP | 62 | 141 | 195 | 89 | 250 | 330 | 220 |
| | | | | | •• | | | |
| Yellowstone R nr Sidney (2) | APR-JUL | 2700 | 3650 | 4300 | 89 | 4950 | 5900 | 4830 |
| - | APR-SEP | 2920 | 4050 | 4820 | 89 | 5590 | 6720 | 5430 |
| | | | | İ | | ĺ | | |
| | | | | | | | | |
| LOWER YELLOWS | | | | | | YELLOWSTONE F | | |
| Reservoir Storage (100 | | - | | | | nowpack Analys | | |
| | | | | | | | | |
| Deserves | Usable | | le Storage ** | 1 | | Numbe | | Year as % of |
| Reservoir | Capacity | This | Last | Wate: | rshed | of | ===== | |

| Reservoir | Capacity | This Year | Last Year | Avg | Watershed | of Data Sites | Last Yr | Median |
|--------------|----------|--------------|--------------|-------|------------------------|------------------|---------|--------|
| BIGHORN LAKE | 1356.0 | 875.8 | 894.0 | 825.9 | WIND RIVER (Wyoming) | 19 | 80 | 82 |
| TONGUE RIVER | 79.1 | 46.6 | 54.4 | 26.7 | SHOSHONE RIVER (Wyomin | g) 5 | 84 | 96 |
| | | | | | BIGHORN RIVER (Wyoming |) 18 | 83 | 93 |
| | | | | | LITTLE BIGHORN (Wyomin | g) 3 | 60 | 73 |
| | | | | | TONGUE RIVER (Wyoming) | 10 | 60 | 82 |
| | | | | I | POWDER RIVER (Wyoming) | 9 | 81 | 96 |
| | | | | | LOWER YELLOWSTONE BASI | N (46 | 76 | 87 |

i * 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

==

Issued by: Released by:

Jason Weller Acting Chief Natural Resources Conservation Service U.S. Department of Agriculture Joyce Swartzendruber State Conservationist Natural Resources Conservation Service Bozeman, Montana



Federal Building, Room 443 10 E. Babcock Bozeman, MT 59715

